The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1517.—Vol. XXXIV. LONDON, SATURDAY, SEPTEMBER 17, 1864. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE;

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 22 years.)

Mr. Crofts transacts business, in the way of PURCHASE or SALE, in every description of stocks, but particularly in BRITISH MINES, in no case departing from the position of a broker, at nett prices. All orders meet with the utmost punctuality and zeal, and advice given as to the nature and eligibility of INVESTMENTS, when required.

Mr. Crofts has peculiar facilities for procuring the following shares at the LOWEST MARKET PRICES:—North Chiverton, East Lovell, Bedol-Aur, New Wendron, Pendeen, South Condurrow, Dale, North Treskerby, Vale of Towy, Bryntail, East Grenville, Wheal Hope, and St. Day United.

FOR SALE, nett cash:—100 Prince of Wales, 50 Gawton United, 40 Wheal Hearle; 20 Bedol-Aur, 20s.; 25 Havan Lead (£5 paid-up), 26s. 6d.

*** ADVICE respecting LEAWOOD SHARES.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

James Lane has FOR SALE at nett prices:—5 Basset and Grylls; 20 Cape Cornwall (fully paid), offer wanted; 50 Crebor, 42s. 6d.; 50 Colenso, 15s. 6d.; 100 Calstock Consols, 23s. 6d.; 30 East Providence, £4; 50 East Jane, 28s.; 20 East Lovell, £9¾; 10 East Chiverton, 42s. 6d.; 30 East Russell, £5; 20 Great Wheal Busy, £3¼; 5 Great Wheal Fortune; 50 Gurlyn, 12s. 6d.; 20 Havan (£5 paid), 30s.; 10 Margery, £5¼; 2 Margaret, £6¼; 60 North Minera (Preference), 5s. 6d.; 50 New Wheal Rose; 20 North Treskerby, £3¾; 10 North Basset, 37s. 6d.; 30 North Devon; 50 Prince of Wales, 6s.; 25 Rosewarne United, 35s.; 20 St. Day United, 33s.; 5 Slithney and Carnmenal, £7½; 10 Wheal Kitty, £5½; 5 Wendron Consols, £3¼.

PETER WATSON'S WEEKLY MINING CIRCULAR AND SHARE LIST, published every Friday, price 6d. each copy, forwarded on application. This Circular contains weekly important information with respect to all the principal dividend and progressive mines in Devon and Cornwall.
73, Old Broad-street, London, E.C.

SHAREHOLDERS AND INVESTORS IN MINES.—Mr. PETER WATSON having been the whole of the past month in Cornwall visiting several copper, tin, and lead mines), is PREPARED to GIVE INFORMATION as to the PURCHASE and SALE of SHARES in all the DIVIDEND and PROGRESSIVE MINES in CORNWALL and DEVON.—79, Old Broad-street, London, E.C.

STOCK AND SHAREDEALER.—Mr. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD-STREET, LONDON, E.C.

TELEGRAPHIC MESSAGES to BUY or SELL Railway, Bank, Mine, and other Shares and Stocks, punctually attended to on commission, or at nett prices for cash, or for fortnightly settlements, with advice as to purchases or sales.

Nineteen years' experience.
(Two in Cornwall and Seventeen in London.)

Bankers: Union Bank of London, and the Alliance Bank of London and Liverpool.

Every information can be obtained on personal application or by letter, as to purchase and sales of mine and other shares, and the best investment for capital.

From the close proximity of his Offices to the Stock Exchange, as well as the Mining Exchange, Peter Watson is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality, and to the best advantage of his clients.—September 16, 1864.

MR. LELEAN, STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, LONDON, E.C.

Shares bought and sold on the usual commission. Telegraphic messages promply attended to. Mines inspected, and reliable information given. Established 15 years.

Mr. Lelean recommends the purchase of Great Laxey, Great South Chiverton, North Minera, East Treskerby, and East Laxey shares as safe and profitable investments, at quoted prices.

NOTICE OF REMOVAL.

MR. J. B. REYNOLDS has REMOVED from 54, Threadneedle Street, to 2, HATTON COURT (49, Threadneedle Street).
N.B.—Orders to buy and sell mining shares promptly attended to.
September 16, 1864.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C.
SHARES in MINES BOUGHT and SOLD on commission, at 1¼ per cent., for immediate cash. Bankers: London and Westminster, Lothbury.

MR. THOS. THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.

WILLIAM SEWARD, MINING BROKER, STOCK AND SHAREDEALER, 19, THROGMORTON STREET, LONDON, E.C.
Commission, 1¼ per cent. on all transactions.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—

Bedford United, £2 6s. 3d	East Lovell, £10½.	North Treskerby, £3⅜.
Bedford Consols, 7s.	East Grenville, £7¾.	North Roskear, £25.
Buller, £22.	East Rosewarne, £3¼.	North Robert, 2s. 6d.
Clifford Amalg., £22½.	Great No. Downs, £5⅛	South Condurrow, 29s. 6d.
Chiverton, £7½.	(call paid).	New Seton, £83.
East Basset, £69.	Gawton, 15s.	Wheal Crofty, 12s. 6d.
East Carn Brea, £7⅛.	Great Wheal Vor, £33.	West Chiverton, £64.
East Russell, £4¾.	Hingston, £4½.	Wheal Seton, £215.
East Caradon, £27¾.	North Downs, 30s.	Wheal Grenville, £7¼.

And is a BUYER OF—

Kelly Bray, 5s.	East Basset, £85.	Chiverton, £8⅛.

T. Rosewarne should be consulted at once by parties about to invest in British mines. Large sums of money may now be made by a judicious selection.
September 16, 1864. Bankers: Bank of London.

JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET, AND MINING EXCHANGE, LONDON, E.C.

J. Hume's Circular for Sept. 10 will be sent on receipt of six stamps. Subscription, 5s. per annum.

East Grenville.—Mr. Hume recommended these shares in his February and previous Circulars at and under £3. Those who followed his advice can now get good profits if they wish to realise—price £7⅝, ⅝.

There is a rising mine in which the same operation may be repeated, and much more successfully, by applying to Mr. Hume.

A BUYER of New Wendron shares. Sellers will please state lowest price.

Mr. Hume transacts business in all the leading market mines.
Commission 1¼ per cent.
Bankers: London Joint-Stock Bank.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C., pays particular attention to British Lead, Copper, and Tin Mines, for which he solicits orders to sell or buy, at nett prices.

FOR SALE:—100 South Grenville, 11s. 6d.; 15 North Basset, £2¼; 50 Vale of Towy, 7s. 6d.; 10 Slithney and Carnmeal, £5¼; 20 East Seton, 4s. 6d.; 10 Central Minera, 40s.; 30 Great West Chiverton, 25s.

BUYER of Central Minera and Billins. State number and lowest price.

MESSRS. WARD AND JACKMAN, STOCK AND SHAREBROKERS, 2, ADAM'S COURT, OLD BROAD STREET, AND MINING EXCHANGE, LONDON, E.C. (Established Eleven Years.)

TRANSACT BUSINESS in BRITISH AND FOREIGN MINING SHARES and OTHER SECURITIES at closest prices, nett or on commission, but not being DEALERS only execute orders confided to them.

Telegraphic messages to buy or sell shares of every description promptly executed for immediate cash, or the fortnightly settlements.
Commission, 1¼ per cent. on all transactions.
Sept. 16, 1864. Bankers: London and Westminster, Lothbury.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.

MINES INSPECTED and faithfully REPORTED ON. DEALER in MINING, RAILWAY, and OTHER SHARES.

His monthly "Circular" for August contains a selected list of Cornish and other mines. Forwarded on receipt of six postage stamps.
Wellington Chambers, 75, Cannon-street West, London, E.C.

MR. GEORGE BUDGE, SHAREBROKER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 17 years), has FOR SALE at nett prices:—10 East Caradon, £27¼; 5 Tincroft, £19; 50 New Martha, £1¼; 40 East Russell, £4¼; 50 East Grenville, £7 11s. 6d.; 4 East Basset, £68; 65 Carn Camborne, 34s. 6d.; 1 Wheal Seton, £212; 50 Hallenbeagle; 150 Vale of Towy, 7s.; 50 Nova Scotia, 35s.; 25 Wheal Hearle; 100 Prince of Wales, 4s.; 200 Redmoor, 2s. 9d.; 150 Anglo-Brazilian, 5s. 6d.; 200 Don Pedro; 50 Okel Tor, £3¾; 50 Slithney Moor, £17⅛; 20 Hingston Down, £4¼; 100 Wheal Hartley, 10s.; 1 South Caradon; 200 Rosea Grande, 3s. 9d.; 50 East Rosewarne, £3¼; 2 West Sharp Tor; 100 Bottle Hill, 4s.; 100 Frontino and Bolivia, 12s.; 5 West Chiverton; 100 Nant-y-Iago, 8s. 9d.; 8 Slithney and Carnmeal; 3 South Tolgus; 50 United Mexican; 5 Wentworth Consols, £23¾; 300 Wh. Pollard, 2s. 3d.; 15 East Lovell; 3 Trelawny; 5 Vigra and Clogau, £23¾; 100 North Treskerby; 5 Nangiles; 10 Billins; 150 Santa Barbara, 10s.

GEORGE MOORE,
1, CROWN COURT, THREADNEEDLE STREET.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

100 Anglo-Brazilian, 4s. 6d.	1 Herodsfoot, £40¾.	15 St. Ives Wheal Allen.
5 Anglo-Mexican, £19⅜.	20 Hingston Down.	40 St. Just Consols, 5s.
4 Bryn Gwlog, £27.	30 Iligan.	20 So. Car. Hooper, 5s. 3d.
3 Buller, £20.	5 Marke Valley, £4⅝.	20 St. Just United.
10 Brynford Hall, £9⅜.	20 Merilyn, 2s.	1 Stray Park.
20 Bottle Hill, 2s.	50 New Wheal Rose, 5s 8d. (5s. paid).	1 Treiawny, £19¾.
3 Clifford Amalg., £32.		10 Tolvadden, 22s. 9d.
2 Cwm Erfin, £32½.	5 North Pool.	5 Treworlis, £2 2s. 6d.
25 Chiverton Val., £1 18 9	25 Nant-y-Iago, 4s. 9d.	10 Twelve Apostles.
30 Cape Copper, £10⅜.	5 North Wh. Crofty, £3¼	100 Trumpet United (offer wanted).
10 Carn Camborne, 31s. 6d.	20 North Downs.	
5 Camborne Vean, £2½.	15 New Wendron, £3¼.	5 Tincroft, £18⅛.
5 Craddock Moor.	50 Nova Scotia.	5 Trencrom.
1 Cargoll, £39.	10 Nangiles, £26⅞.	30 Treweatha, 11s.
5 Chiverton, £7¾.	10 North Treskerby, £3¼.	50 United Mexican, £5⅝.
5 Cobre, £31.	40 New Vor & Metal Utd., £2.	30 Vale of Towy, 7s.
5 Cook's Kitchen, £14½.		1 W. Chiverton, £63⅞.
10 Clijah & Went., £3 12 6	30 New So. Caradon, 2s 9d	50 Wheal Pollard.
1 Dolcoath.	50 North Minera, 4s.	1 Wheal Seton, £209½.
30 Don Pedro, 7s. 6d.	25 New Martha, 24s.	40 West Martha, 19s.
10 Drake Walls.	2 North Roskear, £22½.	100 Welsh Gold.
1 East Basset, £65⅝.	25 North Robert, 3s. 9d.	1 West Caradon, £11.
15 East Carn Brea, £7 7 6	10 North Shepherds, £2.	1 West Tolgus, £59⅝.
50 East del Rey, 11s. 3d.	20 N. Birch Tor & Vitifer, £2⅞	15 Wh. Grenville, £7⅜.
5 East Russell, £4⅞.		2 Wh. Providence, £39½.
20 East Vor, £2¼.	10 North Basset, £3⅜.	1 West Seton, £209 10s.
5 East Treskerby.	50 North Devon, 25s.	1 Wheal Margaret, £8⅜.
3 East Lovell, £9 17s. 6d.	5 Pendeen, £2 10s.	1 West Frances, £29½.
10 East Grenville, £7½.	30 Prince of Wales, 2s. 6d.	30 Worthing, 17s. 6d.
5 East Caradon, £26¾.	25 Prosper United, £4½.	10 Wheal Crebor, 49s. 3d.
30 Fortuna, £3⅝.	50 Fort Phillip, 19s. 9d.	5 Wheal Uny, £5.
5 Gt. Wh. Vor, £31¾.	50 Quebrada (£5 10s. paid)	10 Wendron Consols, £3⅜
80 Gt. Northern Cop., 1s 6d (call paid).	25 Rosewarne Utd., 34s.	1 Wh. Mary Ann, £12⅞.
	25 Rialton East Wh. Rose, £1⅞.	50 Wheal Unity.
15 Gt. No. Downs, £4¾.		5 Wheal Ludcott.
1 Great Fortune, £7½.	50 South Grenville, 10s 6d	20 Wheal Crofty, 15s.
20 Great Busy.	25 So. Condurrow, 29s. 3d.	5 West Stray Park.
50 Great Devon & Bedford, 34s. 6d.	1 South Tolgus, £36.	20 Wheal Harriett.
	50 Santa Barbara, 8s. 3d.	10 Wheal Hearle.
5 Gt. So. Tolgus, £2 14 6	100 Silver Vein.	10 Wheal Union.
10 Glasgow Caradon, £2⅞.	28 St. Day United, 29s. 6d.	1 Wheal Basset.
5 Great Laxey, £15½.	5 St. John del Rey, £36¼	5 Wh. Kitty (St. Agnes).
100 Garreg, 2d.	St. David's Gold, 7s. 9d.	50 Yudanamutana, £2¼.
15 Hallenbeagle, £3½.	5 South Basset, £6⅜.	

And is a BUYER of 25 Hingston Down, £4¼; 5 Clifford, £31½; 10 East Carn Brea, £7½; 10 East Rosewarne, £3; 1 Great Devon Consols; 10 Rosewarne United; 100 Wheal Unity; 5 Rosewall Hill and Ransom; 40 Nant-y-Iago.
2, Adam's-court, Old Broad-street, September 16, 1864.

MESSRS. VIVIAN AND REYNOLDS, 37, OLD BROAD STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS of MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, and EVERY OTHER DESCRIPTION of STOCK.

Commission on share transactions 1¼ per cent. on £100 and above, and 2½ per cent. on less sums.

MR. EDWARD COOKE, MINING SHAREBROKER, 75, OLD BROAD STREET, LONDON, E.C. Reliable information given on application, relative to the merits of mines, either for speculation or investment.
Sept. 16, 1864. Bankers: Alliance Bank, Lothbury.

MR. GEORGE BATTERS strongly recommends his friends to buy West Chiverton, Chiverton, Herodsfoot, South Caradon, Devon Great Consols, Great Wheal Vor, Chiverton Valley, Prosper United, Wentworth Consols, and Slithney Wheal Metal for investment. These shares will pay good interest for money at present quotations.—76, Old Broad-street, London, E.C.

MR. J. W. GILBERT, MINE SHAREBROKER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON.

WILLIAM WARD,
29, THREADNEEDLE STREET, LONDON, E.C.

MR. JAMES H. COCK, STOCK AND MINE SHAREBROKER,
3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

RICHARD CLIFT, MINE SHAREDEALER, late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

MR. WALTER TREGELLAS, STOCK AND SHAREBROKER, 12, St. Michael's-alley, Cornhill, E.C., has REMOVED to 3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

Mr. Tregellas has business in St. John del Rey, Santa Barbara, St. David's Welsh Gold Mine, and North Shepherds.

MR. E. GOMPERS, MINING OFFICES,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent. Bankers: London and Westminster Bank.

WILLIAM BARTLETT, STOCK AND SHAREBROKER,
MINING EXCHANGE, and No. 2, BUCKLERSBURY, LONDON, E.C.
Telegrams immediately attended to.
Commission, 1¼ per cent. on all transactions.
Bankers: Alliance Bank.

GEORGE RICE, SHAREBROKER, 5, COWPER'S COURT, BIRCHIN LANE, LONDON, (22 years' experience), has SPECIAL BUSINESS as BUYER or SELLER, for cash or account, in the FOLLOWING MINES:—

	Closing quotations.		Closing quotations.
Carn Camborne	32s. -33s.	East Wheal Grenville	£ 7⅛- 7¾
Chiverton	7 - 7¼	Great Wheal Vor	31⅛-32
Clifford Amalgamated	31 -31⅛	Nangiles	27 -28
East Wheal Lovell	9¾- 10	Marke Valley	4⅛- 4¾
East Caradon	26¾-27	North Treskerby	3¼- 3⅛
East Russell	4⅞- 5	Wheal Crebor	40s 6d.-42s.
East Carn Brea	7¼- 7⅛	Wheal Grenville	7⅛- 7⅜

East Wheal Grenville.—George Rice has special business in these shares, and speculators and holders, after reading the various "published" reports and opinions of others, would do well to take a little "private advice" when to buy or sell.

East Lovell.—George Rice thoroughly understands the present position and prospects of this mine, and can give sound advice.

Money lent on mining shares.
Sept. 16, 1864. Bankers: Bank of London.

MR. H. WADDINGTON, MINING AND SHAREBROKER, 20, THROGMORTON STREET, LONDON, E.C.
Shares in railways, mines, &c., bought and sold on the usual commission.

Clifford Amalgamated, Grambler and St. Aubyn, East Grambler, and Great South Tolgus should be bought at once. West Seton shares should be bought at the present reduced price.

MR. WILLIAM MARLBOROUGH, STOCK, SHARE, AND MINING BROKER, 48, THREADNEEDLE STREET, LONDON, E.C.
(Established Ten Years.)

BUSINESS TRANSACTED in EVERY DESCRIPTION of SHARES, at closest market prices, either nett or on commission. Reliable information given either personally or by letter, upon the purchase, sale, or exchange of every description of mining stock. Mines inspected by well-known experienced agents. Telegraphic messages promptly attended to. Shares exchanged on advantageous terms. A carefully selected list of Dividend, Progressive, and Speculative Mines forwarded on application.

A FEW SHARES FOR SALE in a FIRST-CLASS LEAD MINE, which is likely to advance 100 per cent. in a short time.

MR. J. P. ENDEAN, STOCK AND SHAREBROKER,
1, CROWN COURT, OLD BROAD STREET LONDON, E.C.

Having had 25 years' experience in the mining districts of Devon and Cornwall, and three in the London market, with daily information of important changes from qualified agents, also the most authentic reports relating to other investments, he is in a position to afford the earliest information to his clients, and to direct capitalists whether to buy or sell in mines, railways, or other securities.

Investors should apply to him for reliable information relative to the Chiverton Mines, also the Camborne and Illogan districts.

A carefully selected list of sound progressive and dividend shares (certain to give a large percentage immediately) forwarded on receipt of 5s. in stamps.

Orders and telegrams receive immediate attention.

MR. T. P. THOMAS, MINING AGENT AND AUCTIONEER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER,
2, PINNER'S COURT, OLD BROAD STREET, LONDON.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE, LONDON, E.C., has the following SHARES FOR SALE:—

20 Hingston Down, £4 2 6	25 East Vor, £3¼.	20 East Carn Brea, £7 8 9
10 Great Laxey, £15½, ex div.	20 East Rosewarne, £3 3 9	50 North Minera, 4s.
	5 Wentworth Cons., £7.	15 Quebrada (£6¼ paid), £5¼.
10 Treworlis, £2¼.	50 South Condurrow, 29s.	
50 North Devon.	25 Chiverton Valley, £2.	25 North Shepherds, £2¼.
50 Vale of Towy, 7s. 6d.	20 No. Treskerby, £3 3 9	15 East Lovell, £10.
30 North Basset, £2.	50 St. Day United, 31s.	15 Bedol-Aur.
5 Great Wh. Vor, £32½.	5 Clifford, £31½.	50 Wheal Crebor, 41s. 6d.

Parties of respectability can have transfers registered into their names previous to payment. Bankers: London and County Bank.

MR. F. W. MANSELL, MINING SHAREBROKER,
75, OLD BROAD STREET, LONDON, E.C.

MR. WM. BIRDSEY, MINE AND SHAREBROKER,
No. 2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. JOHN R. PIKE, GENERAL SHAREDEALER,
OFFERS his SERVICES to INVESTORS.
3, PINNER'S COURT, OLD BROAD STREET, LONDON.

SHARES WANTED IN THE FOLLOWING MINES, which are at the same time strongly recommended for an early and immense rise in value:—

Bryntail.	Camborne Vean.	Chacrom.
Clifford Amalgamated.	Kitty (Lelant).	Rosewarne United.
Carn Camborne.	South Basset.	West Caradon.
		Grambler and St. Aubyn.

Friends and investors, if they would consult their own interests, will do well to act upon this advertisement, and not treat it as one of the empty statements so often put forth in the public journals. HUBERT BARNES RYE.
Mining Offices, 77, Old Broad-street, London, and Mining Exchange, Sept. 16, 1864.

MR. THOMAS CARTHEW, MINING OFFICES,
17a, SISE LANE, BUCKLERSBURY, LONDON, E.C.
Reliable information respecting mining generally can be obtained by applying as above.
Bankers: Robarts, Lubbock, and Co., 15, Lombard-street, London.

FOR SALE AND IMMEDIATE DELIVERY, prices on application:—

1 West Seton.	10 East Lovell.	20 Rosewall Hill.
1 Seton.	5 Kitty (Lelant).	20 Great South Tolgus.
5 North Roskear (call pd.)	2 St. Ives Consols.	25 Union.
1 Basset.	5 West Basset.	20 Grenville.
2 Providence Mines.	5 Margaret.	25 East Grenville.
25 Frank Mills.	5 Treiyon Consols.	100 South Grenville.
100 Redmoor.	50 South Condurrow.	

Sellers treated with in the above, and other shares, also in those temporarily unmarketable.—Apply to James B. Brenchley, 78, Old Broad-street, London, E.C.

MR. G. D. SANDY, SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C.
FOR SALE:—

120 Bedol-Aur, 10s.	15 E. Carn Brea, £7 11. 3.	250 Kelly Bray, 9s. 6d.
20 Bryntail, £3¼.	100 East Laxey, £2¼.	20 North Treskerby, £3¼.
50 Carn Camborne, 32s. 6d	20 East Rosewarne, £3⅛.	1 West Tolgus.
5 Clifford, £31¾.	10 East Lovell, £9 18s. 9d.	50 Wheal Hartley, 12s. 6d.
5 Crane.	5 Gonamena.	100 Unity.
50 Drake Walls.	200 Great Retallack, 2s. 6d.	3 Seton.
2 East Basset, £67¼.	30 Gt. So. Tolgus, £2 11 3	150 Vale of Towy, 7s. 3d.
	10 Great Fortune, £8⅛.	

Special Notice.—Mr. G. D. Sandy strongly recommends the following shares for investment:—West Great Work, Great South Chiverton, East Lovell, East Laxey, Great Laxey. N.B.—BUYER of Cwm Erfin and West Great Work.
Current Daily Price List may be obtained as usual.

MATTHEW GREENE, STOCK AND SHAREBROKER, 27, AUSTINFRIARS, LONDON, E.C., continues to recommend the purchase of Great Laxey and East Laxey shares.

Great Laxey.—Mr. Greene congratulates his friends and clients, who have acted on his advice since April last, when Great Laxey shares were £8, now £15¼, £16, and certain to go higher. The directors at their annual meeting in the Isle of Man, on the 13th inst., declared a dividend of 10s. per share for the three months.

East Laxey.—Sept. 13, 1864: The vein in the shallow adit continues very strong and kindly, with gossan and quartz, and a little lead and jack brangled through the vein. The vein is about 4 ft. wide, and improves in width and character as we go under cover. The deep adit continues about the same. The vein is strong and kindly, with a good masterly appearance. The vein is above 4 ft. wide, and looks to be very promising in depth.—Capts. R. Rowe, John Horsley.

CRENVER AND WHEAL ABRAHAM UNITED MINES.—WANTED, at the above mines, TWO EXPERIENCED CHAIN MAKERS. To careful industrious men constant employment will be given.—Apply to the Manager, at the mine, Crowan, near Camborne.

FOR SALE, the RIGHT to the PATENT of a VALUABLE IMPROVEMENT in VALVES and BUCKETS for PUMPS, and in VALVES or COCKS for OTHER USES.—For particulars, apply to Mr. W. T. Rawle, patent and mining agent, 39, Budge-street, Bristol.

WANTED, a BOILER TUBE, suitable for a dry.—Apply, stating size and price, to Capt. George, Prince Arthur Consols, near Tavistock.

WANTED, a COLLIERY WINDING ENGINE, about 80 horse power, either new or second-hand. A double horizontal preferred, with or without boilers.—Particulars and price to be sent to Mr. J. Fairless, engineer, South Bank, Newcastle-on-Tyne.

WANTED, by the advertiser, a SITUATION as MILL and FORGE MANAGER, or GENERAL SUPERINTENDENT of an IRONWORKS. He has had 23 years' practical experience, and is conversant with the manufacture of rails, bars, plates, puddled steel, &c.; also with the costs, yields, and other accounts appertaining to an ironworks.—Address, "A. B.," 200, Oxford-street, Manchester.

TO CAPITALISTS.—The LESSEE of a FIRST-RATE COLLIERY in NORTH WALES WANTS a PARTNER, with about £2000. A mining engineer or practical colliery manager might have the management. A profit of 4s. per ton can be clearly shown on the coal raised in the royalty, which is an extensive one.—Address, "Bryn," care of Mr. H. Greenwood, advertising agent, Liverpool.

IRON PYRITES.—PERSONS REQUIRING IRON PYRITES from Spain, with FIFTY PER CENT. SULPHUR, are requested to apply to B. Abeille, Fonda del Commercio, Santander, Spain.

MONEY.—CONTRACTORS and OTHERS can be ACCOMMODATED with LOANS, DISCOUNTS, &c.—Apply to Messrs. Wilkinson and Co., monetary negociators and arbitrators, &c., 25, Birchin-lane, Cornhill, London, E.C.

MR. EDWARD BREWIS, 73, CLAYTON STREET, NEWCASTLE-ON-TYNE, TRANSACTS BUSINESS in BRITISH and FOREIGN MINES, on commission or at nett prices. Several mines are selling far below intrinsic merits, and parties about to purchase would do well to apply as above before operating.

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A Monthly Investment Circular on application.

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N.B.—Continental and foreign agencies solicited.

ISAAC FRANCIS, NANT, WREXHAM, a dresser of 30 years' experience, is OPEN to INSPECT ANY DRESSING PLACE on moderate terms. Mr. Francis can introduce PLANS of IMPROVEMENTS that will SAVE THIRTY PER CENT. COST in certain departments of any dressing floors.

MINING IN AUSTRALASIA—MONTHLY SUMMARY.

[FROM OUR OWN CORRESPONDENT.]

ADELAIDE, JULY 27.—Mining in South Australia has made still further advancement since my last letter. Nearly all the mines now fairly at work throughout the colony may be said to be paying expenses at least, and several, besides the Burra and the Moonta, may reasonably be expected ere long to pay dividends. I believe mining was never before in the history of the colony in such a prosperous state as it is at the present time. The great standard mines are doing very well; both the Moonta and Wallaroo are turning out as much ore as before the miners' strike, although that certainly retarded their progress for a time. Considerable alterations have since been made in the underground workings of these mines, and the superior judgment of Captain East has introduced improvements which are expected ultimately to result in a vast increase in the quantity of ore returned. Everyone on the mines seem now in high spirits; the miners are working with renewed energy; fresh machinery is being erected, and the Wallaroo Smelting Works are again supplied with ore, so that they are in full work.

The large new engine at the Matta commenced pumping three weeks since, and soon got the water in fork. From the rich and extensive deposits of ore existing in that mine, it is probable that the returns of ore from Yorke's Peninsula will shortly be much larger than heretofore. Considerable satisfaction is felt here at the prospect of the Yorke's Peninsula Mining Company setting to work to develope the Kurilla and other mines. The Kurilla is very near to the Wallaroo Mines—between them and the Duryea, and is believed to be a valuable property. There is a good lode of yellow ore in the engine-shaft, at a depth (I think) of about 11 fathoms. Some fine carbonate ores were raised nearer the surface. I hear the Duryea Mine is under offer to a gentleman, who is negociating for an English company. I was not aware of this when I wrote, recommending that mine to the notice of English capitalists; but whether or not, I am of opinion, in common with several other persons who know the sett, that hitherto the workings have not been far enough to the east, and that the expenditure of a comparatively small sum now would develope a good mine. The latest workings indicated the direction in which the drive should be carried, and a good branch of yellow ore was cut in the finest country ever opened on the mine, but, unfortunately, the funds of the company were exhausted.

The new lode in the Yelta is turning out splendidly, yielding between 3 and 4 tons to the fathom of black sulphide of copper, which will probably average nearly 30 per cent. produce. This is within 11 fathoms of the surface, and the ore was only cut at 9 fms. The country is gradually becoming more settled, and the ore in the lode more solid. There seems no doubt that it is a continuation of Buchan's lode in the Moonta Mine. The long, patient perseverance of the proprietors is thus likely, at last, to meet with its reward. A few days since a similar discovery was made on one of the Wheal Stuart sections, three miles south of Moonta, where a fine lode of black ore has been cut. This shows that there must be a continuous course of the same ore for four miles, as the Yelta, Moonta, and Wheal Stuart are in a line. Many persons are of opinion that the lode extends much further.

In the North both the Yudanamutana and Blinman Mines are steadily progressing. Smelting operations at the latter are proceeding satisfactorily, and adding considerably to the profits. At the Spring Creek Mine the erection of the engine is being proceeded with. In the South the Bremer district has taken a fresh start. The Worthing Company's mine, at Callington, is still improving; the manager, Mr. Hallett, recently completed the purchase of the Scott's Creek Smelting Works, about five or six miles from the Bremer Mine, in order to possess greater facilities for reducing the ore, and the subsequent produce of the mine has fully justified the transaction. The neighbouring mines of Kanmantoo and West Kanmantoo also exhibit considerable improvement. The Kanappa Mine is doing very well. The Talisker Mine continues to yield good returns of silver-lead, and a very favourable report has just appeared of the adjoining mine—Campbell's Creek. The lode in the Bluff, the promontory of Rosetta Head at Encounter Bay, has been opened, and is said to exhibit a fine course of carbonate of copper. Several of the old abandoned claims on Yorke's peninsula are about to be re-worked, in some cases, I believe, in consequence of actual discoveries having been made on them. Our prospects for the future are splendid; we only want a few hundreds of thousands more capital.

ADELAIDE, JULY 26.—There is an improvement of 1*l.* a ton in copper to note. After the arrival of the English mail the price was fixed at 94*l.* per ton. The demand for low quality galvanised iron is better, but prices have not further advanced. Wire is rather dearer. The arrivals of coal have not been numerous, and prices have advanced somewhat. Burra Burra shares, 70*l.*

Captain Hancock has received the appointment of captain of the Moonta Mines for the present, but he will still retain his position as captain of the Yelta Mine. It is expected that some changes will take place amongst the under captains at Moonta.

A Bill introduced by Mr. Neales has passed its second reading for the Protection of Mining Companies by the operation of the Cost-book System and Limited Liability.—*South Australian Register, July* 26.

AUSTRALIAN MINES.

KAPUNDA.—July 26: The quantity of ores raised in May was 285 tons, of 16¼ per cent. average produce, equal to 46¾ tons pure copper, exclusive of 40 tons of sulphur ores for flux. The quantity raised in June was estimated at about 330 tons, nett weight. Since the date of the last advices 14¼ tons of copper had been shipped per *Clyde* from Melbourne, 29 tons were waiting shipment, and further, 19 tons were in transit to that port for transhipment.

YUDANAMUTANA COPPER.—July 26: The superintendent states—I have now at Port Augusta 32 tons of ore, from 40 to 72 per cent.; 28 tons from 27 to 32 per cent.; and 11 tons of rough copper, of 95 per cent. A further quantity of copper and ore is daily expected at the port. The *Poonatio* is going up to Port Augusta to load; she will take all the ore and metal I can get down; two other vessels will follow. I have accepted tenders for 4000 tons of firewood, at 10*s.* per ton. Capt. Anthony is now at the Yuda Mine; he will report on it by next mail.—Capt. Anthony reports (July 16) —Blinman Mine: During the past month I have been executing the following work:—Driving the 20 fm. level south of No. 2 shaft, sinking a winze below the 10 fm. level, driving a level south of No. 3 shaft into the Big Bunch. Have driven north from No. 4 shaft, and have a good lode, a continuance of the Big Bunch. Driving the 10 fm. level north from No. 4 shaft, by four men; here the lode is a very good one, and the level opening up good paying ground, both in the back and the bottom. Some months ago I expressed a favourable opinion of this part of the mine, and I am now highly pleased to realise more valuable results than I then anticipated. The lode is keeping its proper course, and yielding a large quantity of good ore. At the opening on the back of the lode, between the Big Bunch and the Chimney, the lode is improving in depth, and paying for itself. I now regard this part of the mine with deep interest, believing it to be more valuable than any other part. Stoping back of the 10 fm. level, north of No. 4 shaft, which is yielding an average quantity of excellent ore. I have now thirty-two men working underground, and the various places being worked are presenting very satisfactory appearances for present profit and permanent working. The Big Bunch has been worked during the whole of the past month by six men; the lode throughout is as good as ever, and extending further both north and south. We shall have two furnaces going next week, and the third is being built. Our returns of ore to port have been very small indeed, from want of drays, a large number of bullocks having died from a prevailing disease. During the past month we have plied 20 tons of ore, of near 40 per cent., and have about 60 tons, of 25 per cent. ready to send away, besides 30 tons of good ore to dress. I think the total yield during the four weeks is quite up to 2500*l.* worth of ore alone, and the working cost, including smelters and mechanics, is 866*l.*

WORTHING.—July 26: Bremer Mine: Capt. Prisk reports the mine to be fully as good as per last advices: 260 tons of ore had been raised and dressed, and 50 tons of regulus made during the month; outlay during the same period, 177*l.* 6*s.* 6*d.* The acting manager states that the reduction of ores by Rodda's process was very satisfactory. The quantity of copper at port waiting shipment was 50½ tons; regulus on hand, 83 tons 9 cwts.; and ore, 500 tons. By an assay of the crushed quartz from section 3929, in a rough way, it was found to contain 17 dwts. of gold to the ton.

WHEAL ELLEN.—July 25: Squarey's engine-shaft had been sunk 1 fm. 2 ft. 6 in., making a total depth of 9 fms. 4 in. below the 30. Scott's shaft was being cleared up below the 40, preparatory to sinking it and Godfrey's winze to the 50. Jacka's winze, in bottom of the 40, measured on survey-day 1 fm. 3 ft. 3 in., and, as anticipated, had improved considerably, and yielded on the average 8 tons per fm. of 20 per cent. lead.

GREAT NORTHERN COPPER.—July 15: Captain Garland reports—The end is in about 6 fms. 5 ft. from the shaft, leaving us 4 feet to drive before we may expect to cut the footwall of the lode, but as the ground is so very hard, and no sign of ore, nor any sign of a change in the ground for the better, and the expenses so very great, the cost being 40*l.* per fm. for driving, I would recommend discontinuing the driving of this end, as we cannot expect to find ore in paying quantities in such ground, and, therefore, I would advise putting the men to drive north-west on the branch that was cut 8 ft. from the shaft; the ground there being more favourable for driving, as well as likely to lead to the main lode. If you should decide to continue operations at this mine, I advise that we should drive a level east at the present depth, as the indications are of a more promising nature in the 20 fm. level east than we had west, and the ground being more favourable for working, as it is more in the run of ore. This is the only work that I could recommend to be done for the further proving of the mine, for at the present our prospects are very discouraging.

ENGLISH AND AUSTRALIAN COPPER.—July 27: The stock of coal at Kooringa was 2904 tons; at Kapunda, 493 tons; and at Port Adelaide, 800 tons. There were four furnaces at work at Kooringa, and five furnaces and one refinery at the Port works. Since date of last advices a shipment of 120 tons copper had been made to India.

PORT PHILLIP AND COLONIAL GOLD.—July 23: Quartz Crushing: The total quantity of material passed through the stamps during the month of June was 4104 tons, the yield of gold being 1105 ozs. 16 dwts., or a general average of 5 dwts. 9 grs. per ton, as follows:—

Mine quartz	2821 tons	= 843 ozs.	1 dwts.	gold .. Average,	5 dwts.	23 grs.
Old man ditto ..	628	= 118	3	..	3	18
Surface stuff....	135	29	4	..	4	7
Old Man quartz..	310 }	115	8	..	4	12
Surface	210 }					
Total..	4104	1105	16	Average,	5	9

The receipts for the same period were	£1578 18 2
Payments	1230 11 3
Profit	£348 6 11

The average yield has been low, especially the quartz from the Old Man vein, which has given less than 4 dwts. per ton. The surface stuff yielded quite as well as I expected, and being soft material, consisting principally of earth and coarse gravel, has been crushed with very little cost for wear and tear. The mine quartz shows an improvement in the yield of 11 grs. per ton, and appears to be gradually getting up: the first fortnight of the current month it reached 7 dwts. 3 grs. though this improvement was not sustained during the second fortnight. The stamps have been kept fully supplied during the month with material of one sort or another, and I hope there will now be but few stoppages on this account.—Mine: Everything seems to be going on well, and a great number of men are employed stoping and opening out ground. The south shaft has been sunk to the depth of 300 feet, and they are now opening out with a view to commence to cross-cut the ground at that level.—Machinery: The stamps are all working very well, with only the ordinary interruption for repairs.—Return for July (four weeks): Quartz crushed, 4319 tons; yield of gold, 1260 ozs., or about 6 dwts. per ton. Remittance, 5553*l.* 15*s.* 2*d.*

VICTORIA (London).—Dividends amounting to about 200*l.* have been received since the dispatch of the last mail. The whole of the adventures in which investments have been made were proceeding satisfactorily, and a further investment had been made in the Colibar district to the extent of 2000*l.*

SCOTTISH AUSTRALIAN.—July 21: Mr. Morehead writes—We find a demand for our coal at the rates mentioned in my last; I may say quite in excess of our present powers of production. It, at the same time, happens not unfrequently that the obstructions alluded to prevent us from getting forward the quantity of coal we can readily raise from the pit. This now exceeds 400 and will soon reach 500 tons per day. The great drawback to a steady trade continues to arise from a deficiency in the supply of locomotive power and shipping appliances. This is now in the way of being amended. It is evident that the coal trade of this colony is to increase largely; and, having regard to the quality of our coal, and the extent of our property, Mr. Crowdace is already bringing under my notice as a matter for early consideration the putting down of another and a larger pit, further to the dip of our coal. Although, however, this project formed a subject for much discussion on my recent visit to Lambton, from which I returned only a week since, I do not think it necessary to enlarge upon it at present. Our present pit cannot with advantage be worked so as to produce or afford the means of bringing to the surface more than 600 tons daily.

DUN MOUNTAIN COPPER.—The directors of this company have received advices, dated Nelson, July 12, announcing the safe arrival there of the mining staff which sailed in March last, per *Violet*, and their departure for the company's mines.

FORTUNE COPPER (Western Australia).—July 23: The *Dispatch* is at Champion Bay, loading about 150 tons of copper ore; and the *Kestrel*, daily expected from Sydney, will take 125 tons to be transshipped at that port. I am also looking forward to the arrival of the *Zephyr*, by which vessel, as I informed you in my last, I have engaged freight for 200 tons of ore.—Capt. Penberthy reports, under date June 30: The cutting down of the new engine-shaft to the 40 will be finished this week, and it is within a short distance of the run of copper ore which we are now stoping in the back of the same level. In the 40, north-east end, there is no lode at present taken down, but it is in a good stratum of ground; the stope in this end is producing 3½ tons of copper ore per fathom, and that in the south-west 1¼ ton per fathom, and the stope in the 20 1 ton per fm.—30 fm. level north-east end: At this point there is a quantity of water; the lode is 2 ft. wide, producing stones of black and yellow copper ore, and looks well for a good bunch. On the new section two men are sinking the shaft; the lode is from 5 to 6 ft. wide, composed of lime and spar, with good stones of copper ore, and the ground is easy for exploring. We have dressed this month 30 tons of copper ore and 7 tons of lead ore. I can, with confidence, state the mine never was in so good a position as at the present time, and as soon as the pitwork at the new shaft is completed I shall commence sinking to the 50, in doing which we shall, from the appearance of the 40, sink through a great deal of ore ground.

CADIANGULLONG.—Capt. Holman, July 22: The operations during the month continued to be almost entirely of a preparatory character, or the laying out and opening up the mines, and consequently the quantity of ore raised was very limited, being 33 tons, averaging 12 per cent. for copper: 18 tons of refined copper was on its way from the smelting works to Sydney, and would be offered for sale by auction there on its arrival. Capt. Holman reports that a slight increase in the yield of ores in the following month might be excepted.

Original Correspondence.

BORING BY MACHINERY.

SIR,—I have this week had an opportunity of seeing Mr. Crease's machine, for "boring by steam," and having been the first to advocate the necessity for something of this kind in the Journal, 20 years ago, I beg to say a few words on the subject. Mr. Crease has done much, and deserves well of the miner, but his machine, I fear, is too complicated and expensive for general use. Hosking's machine, exhibited at the Polytechnic, when driven by a turbine, will be more likely to answer; but there is room for improvement, and I still hope to see boring by manual labour superseded to a large extent.

J. B. WILKIN.

COAL-CUTTING MACHINES.

SIR,—This subject has been much discussed through the Journal of late, and as it is highly important I have watched it very closely, because I think in the end it will be equally as beneficial to the collier as to the master. I certainly consider that Mr. Ridley, by the late correspondence, has succeeded in establishing this fact, and also the superiority of the trunk cylinder over the old arrangement of cylinder. For this reason the West Ardsley Company, in their letter, furnish particulars of an oscillating cylinder, in which they give the dimensions of the "regulated piston-rod," of the same size as the trunk. This must prove that Mr. Ridley's statements are correct. Also, your readers will have seen that the two methods given of ascertaining the quantity of compressed air do not agree, and as Mr. Ridley's is the common rule, therefore I must conclude the 25 per cent. system must be wrong. Mr. Ridley has also so far succeeded in showing that the West Ardsley Company has not an "original invention for coal-cutting;" he also establishes the fact that he is as much interested in the one machine as the other; hence his motive for the recommendation, and Mr. Jones distinctly denying the allegation of his abandoning the trunk. However, I think it is a great pity that this long-talked-of coal-cutter had not got into better hands. I have seen all the pick-machines at work, and I consider them all one and the same machine, with but very slight modifications; but I must say that I consider the trunk arrangement the best adopted, taking all things into consideration. The High Royd machine is not at all adapted for the Barnsley coal—it will never answer in its present form; neither do I agree with Mr. Ridley's lightness as a recommendation for his trunk machine for that coal. The machine that works the Barnsley coal should weigh at least 30 cwts., and run on a road of rails of about 30 lbs. per yard, and cut with two picks at the same time, and the trunk arrangement I consider is the best to apply to this coal, and I do not care how soon it is accomplished. I have not the least doubt but it will be done, and perhaps by other parties, while they are discussing about it.—*Sept.* 13.

A BARNSLEY COLLIER.

BASTIER'S CHAIN PUMP.

SIR,—I have read with much interest the notice in the Journal of Bastier's chain pump, and if it really performs all that is stated, which there is no reason to doubt, it must prove a very great boon to the miner; but I should be much obliged if the inventor, or anyone else, would give some little further explanation of its mode of working. In the case given, the weight of the column, in the ordinary mode of pumping, will be—depth, or vertical height of column, 531 ft.; diameter of pipe, 4¼ in. = 14·13 in. area; and pressure of column, 265 lbs. per square inch = 3744 lbs. total pressure, which would require, according to the ordinary mode of forcing or lifting water, to force the water through such a pipe, the depth given at a velocity sufficient to produce 195 gallons per minute, an engine of at least 40-horse power; but by Bastier's mode this is effected by an engine of 4½-horse power. How, then, is the pressure got rid of by the multiplication of discs, and so dividing the column, and reducing the maximum pressure? There really is something very curious about this, and any further information on the subject will be very acceptable.

M. E.

Newcastle-on-Tyne, Sept. 9.

ENGLAND'S MINING SCHOOL—No. IX.

SIR,—In analysing what I term the second theory of the coal formation, I have to notice what is commonly called the bog turf theorists. I admit bog turf grows, but by some unaccountable means it is said to sink deep in the sea, and there sand accumulates on it, and forms a layer of silicious rock (millstone grit, if they like to call it by that name); then, I ask what caused the next layer to form on that, and then some six or eight other layers to again form in rotation, all varying in composition, till they filled the sea or lake to the surface? When a new turf bog grew, when it was at perfection, that also sunk down sufficiently deep to allow all, or nearly all, of the original formations to grow or accumulate over the former, till the sea or lake was again filled, and a third turf bog grew, and again sunk. Now this in some districts must have taken place over fifty times. I asked if such a theory could be passed by sane men, unless they show it to have been governed by clock-work, or reasonable grounds shown as to where the materials came from to form the iron ore and other rocks? To me such theories are only fabulous nonsense, and never should be seen in print in the nineteenth century, further than to record the darker ages of bygone days.

I next take Mr. S. B. Rogers's theory as to coals being formed from sea-weed, which is about as reasonable as either of the former. He says that immense quantities of sea-weed formed in the Atlantic Ocean, and there floated about till they became inhabited by fish, with and without shells, when the mass, from specific gravity, sank to the bottom, and that formed a bed or stratification of both vegetable and animal matter; this in time, he says, became covered with sand, and it formed a bed of coal: he further states that, after the settling down of the sea-weed and fish, sand and mud and mineral substances settled down, and by electric action became millstone grit, sandstone, shale, clay, iron, and other ores. After that there were deposited beds of shells, and even living fish and reptiles, natives of the ocean, to an immense thickness and extent of breadth, superior to the embryo beds of coals and mineral deposits before mentioned; here, he says, we have the origin of the carboniferous or mountain limestone, which he admitted to be a marine formation; this, he says, is his idea, not only of a coal vein, but of all the entire *coal fields*. In reply to this portion of Mr. Rogers's letter, I have to notice that, if we acknowledge the existence of these immense beds of sea-weed to be now floating about in the Atlantic in quantities sufficient (he says) to impound Columbus, and but for a storm he would have been lost and never have discovered America, and that these beds of sea-weed did sink in a position to have formed one bed of coals, which to me is not very tenable, then, from his own showing, the sandstone or millstone grit, shales, and iron, and all the other rock, were formed on it by crystallisation; then, I ask, if all these beds, except coals, formed, as he admits, by crystallisation, why does not coal form under the same natural law? If we credit either of these theories, I say then that there appears to have been a great mistake in the first formation of the earth, if coals and *iron* were accidentally omitted, and it was afterwards discovered that man could not exist on the earth without them. Then it becomes evident that the earth was in an unfinished state, and something was necessary to be done to grow coals and iron; then I may suppose a consultation was held, and three ways were suggested to form coals—first to form an immense forest of timber trees, and then *deluge* the *world*, and wash them away, and by magic cause them to settle down regularly, one on the other, to form coal, then leaving it to the ocean to precipitate and crystallise its contents, to form all the other layers on the bed. The next suggestion was to grow immense bogs of turf, and then sink them deep in the ocean, leaving the ocean as before to perform its part by crystallising to get millstone grit and iron ore to cover the bogs. Notice, one bog sunk only produces one bed, fifty beds have to be produced in the same way, in that case the world must have been bobbing up and down, just like the main-beam of an engine. Then comes the third suggestion, to grow as much sea-weed as would form a sufficient quantity of coals to support man's need, and then collect and sink it to the bottom of the ocean, and let the millstone grit and iron ore be produced by the ocean precipitating and crystallising; to accomplish this magic must again have had its full share in the action, to bring all the succeeding beds of sea-weed in a boundless ocean to the same spot, and settled them down so neatly as coals are formed, each new formation on the former. I cannot help remarking that nearly all theoretical writers on coal formations are all at a loss to tell where the shale, millstone grit, and *iron* came from, and they are compelled to fall back on what I believe to be the true processes—that is, the ocean precipitates its contents to the bottom, where it crystallises. I am aware the ocean contains all the necessary ingredients to form all the stratifications and minerals found about coal formations. We must naturally suppose the sea contains portions of every substance that the earth is composed of, a large portion of which we can detect going into the sea, such as animal and vegetable matter. It is known to every one that rivers are daily carrying matter into the sea; then what becomes of it? I have seen no one yet that has attempted to account for what became of it, or where it goes to, or in what form it crystallises. More of this when I have finished with Mr. Rogers's theory.

Mr. Rogers makes a very fair attempt to show that sea-weed is the origin of coal by analysis: he says it contains a large portion of nitrogen, a substance that particularly abounds in all animals, but not in vegetables, excepting sea-weed; hence he says that the origin is fish and sea-weed, and these combining with hydrogen and carbon, form all substances found in coal. Mr. Rogers goes even further, and says that sulphur and phosphorus, with a small quantity of lime and iron, are elements which are never found in land plants, yet all these mineral substances abound in fish, shells, exuvia, &c. Mr. Rogers also says that these beds of weeds often disappear for years, and then others are formed: these he considers are the cause of the succession of coal beds. Then form the other layers of substances on them. He says that the carboniferous limestone, by some mysterious power, keeps the floating weed and fish anchored over the former beds, and even prevents them from being broken up or drifting by the wind, or even storms. A few pieces at times get detached, and Prof. Ansted found them in the East Indies, embedded in granite. Here magic is brought into full play, in bringing all the weed to the same spot, and anchoring it till it again settled down on the original spot. I do think that Mr. Rogers's theory is rather a strange one, but he has certainly shown more natural genius in accounting for each bed or layer of coal being deposited over each other than any I ever heard of among his predecessors. He even admits that the sea precipitates and crystallises all the layers, excepting coal. This is certainly a step in the right direction. He also admits that limestone was formed by precipitation and crystallisation. Mr. Rogers's theory, if I understand him aright, goes to show that coal could not form without fish and sea-weed, and that they were the origin of nitrogen: then I may ask Mr. Rogers to tell me where the nitrogen comes from to form the weed and fish? for the origin of nitrogen must have been before even the fish lived. Mr. Rogers appears to have overlooked the most essential point that requires to be carefully studied on such important subjects, which is that all amalgamated substances are composed of a limited few. The grand art is to detect them in their altered condition, caused only by the variation of a few parts. Look at vinegar and sugar, and hundreds of other things: see also flint block and silica. I do think had Mr. Rogers only given these his due consideration he would not have written his amusing letter on coal formation. He certainly did make a very ingenious move to account for coal always forming on and above lime formations. I have not noticed that anyone holding the views of coals being formed from trees or bog turf ever accounted for their always settling down on mountain lime formation. Neither have they told us if the raft sunk at the mouth of the Amazon is on a lime rock formation. It may be they were timid, and feared the severity of the ancient law for the prosecution of persons practising witchcraft or magic. This caused them not to speak out. Mr. Rogers has the advantage of knowing that if the Act is not repealed, it will not be acted on at the end of the 19th century. I am surprised that a man can now be found who believes in magic, or that Neptune and the nymphs of the deep did spin ropes to anchor the sea-weed; but I did see a man walking the streets of London with a large globe on his head, with an inscription on it, "The World of Magic." In that case Mr. Rogers may be correct, but I have no belief in it myself.

In my next I beg to call your readers' attention to the vast amount of animal and vegetable matter daily carried into the sea, and ask what become of it, before I take up the subject of coals.

N. ENNOR.

THE SLATE MOUNTAIN COMPANY.

SIR,—The very sensible letter of Dr. Hastings, in the Journal of Sept. 3, not having been publicly noticed by any of the officials, I wish to suggest to the shareholders of this company and the Croiser Valley Company the propriety of each having an independent report from an agent of high standing in that district, as the sett of each company is on the same freehold on the Cynicht Mountain. Let them put two straightforward questions to their Inspectors, and insist on having direct replies.

Is there any resemblance in the colour, grain, and cleavage of this slate to that found at Messrs. Holland, Matthews, and Palmerston's quarries?

Is it likely either of these companies can raise slate enough to pay dividends in ten years time, and, if not then, when?

I have every confidence in the skill and ability of their engineer to lay out a quarry; but I doubt his power to improve the quality of any such rock as I saw on this mountain, which, in my opinion, is very far from being the first-rate quality alluded to in the prospectus. The shareholders may well doubt all reports, when it is stated in that appended to the Croiser Valley prospectus—"This property is situate in the very heart of the Festiniog slate district, surrounded by well-known slate quarries, which are paying, and have long paid, large profits." I found it seven long miles from Festiniog, away over the mountains, and, as to any quarries near that ever paid a profit, the nearest are the quarries of Lord Palmerston, Holland, and Matthews—miles away, with no more connection with the Cynicht quarries than those of Carnarvonshire. I have a friend who bought shares in the Croiser Valley on the faith of the prospectus and reports appended. I trust there may be no necessity to try over again, before Mr. Baron Martin, or one of his learned brothers, a case similar to Bale *v.* Cleland, compromised at the last Guildford Assizes, the particulars of which appeared in the Supplement to last week's Journal.—*Sept.* 12.

AN ENGLISHMAN.

MINERAL DEPOSITS IN CARMARTHENSHIRE.

TAIBACH MINE.

SIR,—I again take up my pen in defence of the parties injured. I glory in offering support to the man of truth, and I can also forgive the accused, if he can prove his innocence. The persons injured are those who have come forward to assist a gentleman to work the Taibach Mine, to the amount of 200*l.*, and the work done has fully satisfied them; and the mineral specimens produced from this mine leaves not the slightest doubt but that it is a rich mineral property. It is seldom we see any work now carried on by a few private persons—everything is now carried out by a body calling themselves "The Limited Company;" and it is not to be wondered at the above parties trying to get some London agent to bring the Taibach Mine into the market, and there is not the least doubt it would have been in the market had it not been for Capt. Waters, who wrote to say that it was out of the metalliferous range, at the same time admitting he had never been within four miles of the property. Your readers will, no doubt, have seen and read the correspondence respecting this mine, and will smile at this Professor of Geology, who condemns from his knowledge of the aforesaid to injure parties by his false representations. These said parties will bring Capt. Waters before the public until he proves, by his sound knowledge and learning in geology, that his assertions are right, or until he acknowledges he is wrong. Capt. Waters ought to defend himself, to uphold the profession of classical miners. What can we think of Capt. Waters after he has been challenged by a miner of thirty years' standing to confute his (Capt. Waters') opinion? We can only say that he is guilty of doing a great injury, not only to the Taibach Mine, but to the whole county of Carmarthenshire. In last week's Journal there is a small note on this subject, signed "H.:" he states he trusts that this controversy will cease, and promises to bring out some articles on the Taibach district. If he carries out what he has stated to the satisfaction of other classical men, it will then be time enough to say if all the articles he can write will compensate the owner of this mineral property the injury that Capt. Waters has done him.

WELSHMAN, No. 2.

PRICES OF MATERIALS,

As charged at the PROVIDENCE MINES during the following months:—

Description.		April.	May.	June.
Common iron	Per cwt.	10s. 6d.	—	—
Hoop ditto	„	14 6	—	—
Borer cast-steel	„	45 0	—	—
Johnson's hoop L blister ditto	„	50 0	—	—
Nails, 6-inch	„	19 0	—	—
Ditto, 5-inch	„	19 0	—	—
Ditto, 4-inch	„	19 9	—	—
Ditto, 3¼-inch	„	20 0	—	—
Steel-point shovels	„	—	48s. 0d.	—
Leather	per lb.	1 9	—	1s. 8d.
Dram timber	per foot	0 10	—	—
Longsound timber	„	0 9	—	0 8
Yellow pine ditto	„	—	1 5	1 4
Cardiff coals, per contract	per ton	11 6	11 9	—
Main Colliery ditto, ditto	„	—	—	11 0
Best candles, free of carriage	per doz.	5 3	5 3	5 3
Tallow, ditto	per cwt.	—	45 9	—
Olive oil, ditto	per gallon	—	—	5 3
Powder, ditto	per 100 lbs.	46 0	—	46 0
Safety fuse, ditto	per coil	0 4	0 4	0 4
Hilts, ditto	per doz.	1 9	—	—

CORNISH PUMPING ENGINES.—The number of pumping engines reported for July is 34. They have consumed 2060 tons of coal, and lifted 15·8 million tons of water 10 fms. high. The average duty of the whole is, therefore, 51,800,000 lbs. lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded the average duty:—

	Millions
Boscawen—70 in.	55·5
Chiverton—Cookney's 60 in.	58·8
Cargoll Mines—Michell's 72 in.	61·3
Cook's Kitchen—50 in.	56·1
Crane—70 in.	69·1
Great Wheal Busy—Harvey's 85 in.	64·4
Great Work—Leeds' 60 in.	67·1
New Rosewarne—Phillips's 65 in.	53·9
North Roskear—Doctor's 70 in.	59·3
North Wheal Crofty—Trevenson's 80 in.	54·6
South Wheal Frances—Marriott's 75 in.	59·1
Treloweth—60 in.	56·4
West Caradon—Elliot's 50 in.	62·3
West Wheal Seton—Harvey's 85 in.	61·0
Wheal Ludcott—Willcocks' 50 in.	57·2
Wheal Margery—Welsley's 45 in.	64·6
Wheal Seton—Tilly's 70 in.	62·0
Wheal Tremayne—Michell's 60 in.	61·5

HOLLOWAY'S PILLS AND OINTMENT—UNPARALLELED POPULARITY.—The wonderful cures effected by these unequalled remedies in all parts of the world have won for them their present favour. Both pills and ointment are composed of ingredients which purify at the same time that they strengthen. No one can deny that health depends upon pure blood and the natural action of the animal organs. Both objects are effected without risk or danger by Holloway's medicaments, which are as innocent as they are potent. Internal disorders and external blemishes succumb to their power. These remedies, so applicable for the relief of the commonest complaints, are no less adequate to deal safely with the most formidable and dangerous diseases which can afflict mankind.

Meetings of Mining Companies.

GREAT BRIGAN MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, No. 1, Winchester-buildings, on Thursday,
Mr. M'CALLAN in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed.

A statement of accounts for the four months, ending with the costs for July, was submitted, from which the following is condensed:—

Balance last adit	£1624	6	0	
March mine cost, merchants' bills, &c.	632	9	3	
April ditto	680	17	6	
May ditto	798	8	11	
June ditto	691	2	4 = £4427	4 0
Call	£1690	8	10	
Copper ore sold	1374	4	8	
Tin ditto	155	4	7	
Old materials	122	0	1 = 3341	18 2
Balance (debit)			£1085	5 10

The report of the agent was read, as follows:—

Sept. 14.—Since the last general meeting we have sunk Highburrow shaft 7 fathoms 1 ft., by twelve men, at 30*l.* per fm.; the lode is very much disordered, and split into branches; the ground in the bottom of the shaft is not so hard as it has been; the shaft is now down 12 fms. below the 45, which is 57 fms. below the deep adit. There are very kindly lodes in the south ground, underlying north towards the shaft. I recommend to suspend the sinking of the shaft for the present, case and divide the same from the 45 to the 57, cut plat, and then drive a cross-cut south to intersect the south lodes; the distance to reach the first lode will be about 6 fms. If Saturday lode keeps the same bearing and underlie as at the deep adit, we shall not have more than from 15 to 20 fms. to drive south from the bottom of Highburrow shaft to cut the lode; these lodes are above the elvan, and are likely to produce large quantities of ore, which I consider a very important point. The 33 has been driven west of the above shaft 10 fms.; from this point a rise has been put up 5 fathoms, and holed to Scamell's shaft, which has ventilated this level, and allowed us to draw the stuff with greater speed, this being done by six men, at 8*l.* 10*s.* per fm. I recommend clearing out the above level, east of Highburrow shaft, and drive the end to prove the lode east of the cross-course. The 33 cross-cut has been driven south 11 fms. 4 ft., by six men, at 7*l.* 10*s.* per fathom, and intersected a lode and driven on its course 3 fms.; it is kindly, producing a little ore; but, not being satisfied, we have cut the main part. I have put the men to drive south, and expect to cut the lode in a few days, when I hope that it will prove productive. A winze has been sunk below the 20, on the south lode, 5 fms., by six men, at 6*l.* per fm.; the first 3 fms. sinking the lode is worth 6*l.* per fm.; it then became disordered by a hard floor of spar, but is now looking more kindly, and a good branch of ore coming in at the bottom of the winze. A cross-cut is driven north, east of Ennor's shaft, in the 20, 14 fms. towards the tin lode, this being done by four men, at 6*l.* per fm.; and, according to the bearing and underlie of the lode, we have about 5 fms. further to drive to reach the same, which, when cut, I expect to open some good tin ground. A winze sunk below the 20, east of Ennor's shaft, on the south part of Brigan lode, 6 fathoms, this being sunk by four men, at 8*l.* 10*s.* per fm. The lode in the winze produces good stones of ore, making larger in depth. The deep adit cross-cut has been extended south from east boundary shaft 8 fms., being driven by four men and two boys, at 7*l.* 10*s.* per fm., and at this point intersected Saturday lode, which has a very promising appearance, underlying north about 3 ft.; where we cut the lode is not more than about 6 ft. from where it changed its underlie. There are two slides now in the end, one underlying north and the other south. I put the men to sink a little below the level, under the slide where the lode produces very good stones of ore. I believe this will be a good run of ore ground for a great length and depth under the influence of the slide; the distance from this cross-cut to the new shaft is 42 fms. To open this piece of ground, I recommend to drive the adit level east of cross-cut, on the course of the lode, as fast as possible. We have completed the new shaft from surface to the shallow adit, put in penthouse, cut a plat, and sunk the shaft 11½ fms. below the shallow adit, which is about the same depth as the deep adit, this being done by six men, at 7*l.* per fathom. I now propose to cut a plat in bottom of this shaft, and drive a little to the south of west, to cut the lode, and then continue on its course towards the end coming east; by doing so it will open the ground in half the time; and as soon as the men get forward enough to allow us to put a pare of men to sink the shaft until we come down on the back of the lode, which will be about the 10, and under the influence of the slide at this point, I anticipate good orey ground. In the adjoining mine they have had splendid courses of ore in the 10, 20, and 30, on the same lode, at which levels we may reasonably expect similar bunches. As soon as the deep adit level is communicated to the new shaft we shall be able to sink three or four winzes on the course of the lode under the slide, and soon lay open a long piece of ground. From our eastern boundary to Highburrow shaft is nearly 200 fms., and is, in my opinion, a good piece of ore ground. In conclusion, I recommend the points referred to in this report to be carried out, when, I believe, if prosecuted with vigour, the shareholders will be remunerated for so doing.—JOHN TREDINNICK.

The CHAIRMAN having moved that the report should be entered on the minutes, and that the accounts should be passed and allowed, stated that he had always been given to understand that the Brigan sett presented capital features of success. It was traversed by several lodes and cross-courses, and the character of the ground was everything that could be desired, and he believed, from the discoveries already made, that by prosecuting the operations recommended by the agent, whom he believed to be a most trustworthy man, success would be realised. He had a strong opinion that by the next meeting the concern would be placed in a very different position.

The SECRETARY mentioned that the mine had been inspected by two or three agents in Cornwall, and their reports were highly satisfactory. The lode just intersected in the cross-cut was, no doubt, the Saturday lode, which was so productive in Wheal Rose. This lode would, there was no question, be cut at the Boundary shaft, when a communication would be made between that shaft and the cross-cut. From the character of the lode it was believed, that a very large amount of tribute ground would be laid open at this part of the mine, from Boundary to Highburrow shaft, which was over 200 fms.

A SHAREHOLDER saw by the report that the agent suggested a cross-cut being put out at the bottom of the shaft. He would like to know how long it was anticipated it would take to intersect the Brigan and other lodes?——The SECRETARY stated that the Brigan lode was underlying south, and the elvan course north, and he thought they would have to drive from the bottom of the shaft a distance of 8 or 10 fms. before the elvan course was intersected, and he believed Saturday lode would be cut between the bottom of the shaft and the elvan course.

Mr. HUSBAND enquired the amount of the estimated loss for the next three months?

The SECRETARY said at the last meeting the agent estimated that the loss per month would be about 300*l.*, but the loss during the past four months had been only 725*l.*

The report was ordered to be entered on the minutes, and the accounts passed and allowed. A call of 4*s.* per share was made, and a resolution was passed to the effect that a petition be filled in the Stannaries Court against all shareholders in arrear of two calls.

A vote of thanks to the Chairman terminated the proceedings.

GREAT NORTH DOWNS MINING COMPANY.

A general meeting of proprietors was held at the offices of the company, No. 1, Winchester-buildings, Old Broad-street, on Thursday,
Mr. PINNER in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed.

A statement of accounts for the four months, ending with costs for June, was presented, from which the following is condensed:—

Balance last audit	£1457	8	6	
April mine cost, merchants' bills, &c.	235	19	9	
May ditto	254	4	0	
June ditto	245	16	11	
July ditto	243	15	6 = £2437	4 8
Call	£1459	18	10	
Copper ore sold	252	3	6 = 1712	2 4
Leaving debit balance			£ 725	2 4

The report of the agents was read, as follows:—

Sept. 14.—Vivian's engine-shaft is sunk, cased, and divided, and ladder-road fixed complete to the 67. The shaftmen are at present engaged driving the said level east and west of the above shaft; we shall use the utmost dispatch to get these ends a sufficient distance from the shaft to enable us to cut piat and resume the sinking, which we hope to do in the coming month; present price for driving, by 12 men, 15*l.* per fm. The 57 is driven west of engine-shaft, on Vivian's lode, 36 fathoms, which has opened profitable ground; the lode in the present end is 4 ft. wide, worth 10*l.* per fathom; driving by six men, at 9*l.* per fm. The back of this level is being stoped by 12 men, at an average price of 3*l.* 12*s.* 6*d.* per fathom; lode worth 8*l.* per fm. The lode in the winze sinking below this level is 2 ft. wide, producing good stones of copper ore, with an improving appearance, and we think will soon resume its former productiveness; present price for sinking, by four men, 9*l.* per fm. Jenkins's shaft is sunk 6 fathoms below the 57, where we have met with water, and, consequently, are obliged to suspend the sinking until the cross-course is cut through in the 67, east of engine-shaft, which we expect to do some time this month. The lode in the 57, driving east of the latter shaft, is 2 feet wide, worth 5*l.* per fathom; driving by four men, at 8*l.* per fm. Pendarves lode in the 57, driving east of cross-cut, is 2 ft. wide, composed of soft quartz and peach, looking very promising, and producing saving work for copper ore. In the levels above, and especially east from this end, the former workers wrought on this lode very extensively, and beat away all the lode that was discovered, which augurs well for its productiveness. From present appearance of this lode in the 57 we see no reason to doubt our meeting with similar results; present price for driving the end, by two men, 8*l.* per fm. This lode in the same level, which is driven 2 fms. 2 ft. west of cross-cut, as it is getting out of the influence of the cross-course is very much improving; at present it is 2 ft. wide, worth 8*l.* per fathom; the end is being driven by four men, at 7*l.* 10*s.* per fm. Rule's shaft is sunk 13 fms. 4 ft. below the 40, on Pendarves lode. The lode in bottom of the same is 2 ft. wide, yielding stones of ore; we anticipate communicating this shaft to the 57 in about one month from this time, which will thoroughly ventilate the south part of the mine, and give us good discharge for stuff, and also enable us to increase the number of men in the ends on the lode referred to above, and open up ground rapidly; present price for sinking this shaft, contract to hole, 12*l.* per fm. King's shaft is sunk 9 ft. below the 75, where we cut water, which, for the present has hindered us from sinking. The 80, which is being driven west from Wheal Rose, will come in about 3 fathoms below the present bottom of this shaft, and, consequently, drain it to that depth, when we shall resume the sinking. The part of the lode carried is 4 ft. wide, worth 15*l.* per fathom, and looking very promising. We have suspended the driving of the 75, west of the latter shaft, and put the men to stope the bottom of the level as deep as the water will permit into the present end. When this is accomplished we shall drive the end to that level, as by so doing we shall have 9 ft. more backs to take away. The lode in this stope is at present worth 10*l.* per fathom; stoping by six men, at 4*l.* per fm. We have also set the east end of this shaft to stope 7 ft. long to four men, at 3*l.* per fathom; lode worth 10*l.* per fm. The 57 is driven west of King's shaft 44 fms.; the last 3 fathoms driven the lode has very much improved; in the present end it has a good appearance, and is worth 12*l.* per fathom; driving by six men, at 8*l.* 10*s.* per fm. Sleggan's shaft is sunk 3 fms. 4 ft. below the 62, and are glad to say the lode in the bottom of the shaft is very much improved; the part that is being carried is 4 ft. wide, worth 20*l.* per fm. We regard this to be an important point and a good discovery, there being 60 fms. distance between this and King's shaft east, and 120 fms. west to a cross-course. In this piece of ground we have no doubt, when opened, good deposits of copper ore will be found, looking at the character of the ground, the size and appearance of the lode, together with the fact of its being drained by Wheal Rose engine, we do not know of a better speculation. The following are the particulars of the ground opened in the past four months:—Shafts and winzes sunk, 47 fms. 0 ft. 11 in.; levels driven on course of lode, 41 fms. 5 ft. 9 in.; cross-cuts driven, 13 fms. 3 ft. 8 in.; ground stoped on tutwork, 26 fathoms 0 ft. 10 in.: total, 128 fms. 5 ft. 2 in. Shafts cased, divided, and ladders fixed, 70 fms. We recommend the present mode of operation being carried out in the ensuing four months, together with the sinking of Vivian's engine-shaft below the 67. In conclusion, we would remark that the mine, on the whole, has opened out quite equal to our expectations, and the present prospects are more encouraging than we have ever seen them.—J. W. CRASE, M. JENKIN.

The CHAIRMAN proposed that the report should be entered on the minutes, and that the accounts should be allowed and passed.——Mr. HUSBAND seconded the proposition.

The SECRETARY, in reply to a question, stated that there had been a sale of ore since the accounts were made up, but that would go against the next month's cost.

Mr. MURPHY enquired if the committee were in possession of any information from the mine beyond that contained in the report? He (Mr. Murphy) put this question because he had understood that a telegram had been received to the effect that a great improvement had taken place. He would suggest that for the future the report and financial statement should be placed in the hands of the shareholders some two or three days prior to the meeting, so that they might come prepared to fully discuss the different points adverted to.

Mr. M'CALLEN said the object of the committee was to obtain all the information up to the latest period, which could not be done if the suggestion just made were adopted.

Mr. MURPHY said that the weekly reports from the agents, which appeared in the *Mining Journal*, gave the shareholders the information as to the progress of the mine, but the reports prepared for the general meetings contained a *resume* of the whole, and which it was impossible for shareholders to digest and discuss unless carefully perused prior to to the meeting.

Mr. ARNOLD suggested that the report day should be altered from Saturday to Wednesday or Thursday, so that later information might appear in the *Mining Journal* on the Saturday.——The CHAIRMAN said that suggestion should receive attention.

Capt. KENDALL (in reply to questions) stated that he thought they would soon be able to resume the sinking of Boundary shaft, as the 80 fm. level end in Wheal Rose was 3 fathoms deeper than King's shaft, and the end was in a fine course of ore.

Mr. J. PERMEWAN considered that in a few weeks King's shaft would intersect the same course of ore—looking at the fact that the ore in Wheal Rose dipped into Great North Downs, it resolved itself into a matter of certainty.

Mr. MURPHY wished to know if it were premature to enquire as to when it was probable dividends were likely to be paid?——Mr. ARNOLD believed that, by a continuance of the success that was now following their operations, Great North Downs would in twelve months hence be paying dividends. The mine never looked so favourable as at the present time.——Capt. KENDALL said, that as King's shaft had gone down through a good course of ore, he thought they could easily return a little more ore, for the fact was they were locking up capital.——Mr. ARNOLD mentioned that the lode in King's shaft was 12 feet wide, but only 4 feet were being carried.

The CHAIRMAN said that the sale of ore had produced 200*l.* more than the previous sale, and that during the past four months the loss had been some 700*l.* or 800*l.* less than during the previous four months. Although during the past four months there had been a great deal of work done, the loss had been decreased by the increased returns of ore.——Mr. MURPHY suggested that the amount realised by the sale of ore should be carried to a revenue account, and put aside for the purposes of dividend. The assets realised by the sale of ore should be kept separate from the working capital.

The CHAIRMAN said the result of such an arrangement would be, that instead of making a call of 5*s.* per share it would be 10*s.* per share.—Mr. MURPHY thought they ought to assimilate the returns of ore with the passenger traffic on a railway. It ought to appear that there had been so much money earned, which should be carried to revenue.

The CHAIRMAN said that the first charge against revenue in railway accounts was the working expenses, and the first charge against revenue in mine accounts was the expense of working the mine.——Mr. J. FIELD thought it very desirable for shareholders to know the amount of ore sold, for it was hardly sufficient information to state the amount it realised.

The SECRETARY said that the suggestion should be adopted.——The report was ordered to be entered on the minutes, and the accounts were passed and allowed.

A call of 5*s.* per share was made.

Mr. PERMEWAN suggested that a list of the shareholders should be sent to the mine.——The SECRETARY said it was done every four months.——A discussion arose upon the question of inspection, which resulted in the matter being left as at present—the mine to be inspected by an order from the secretary.——Mr. FIELD suggested that whatever items of information were communicated to the London office, relative to any improvement or otherwise in the mine, a copy of the communication should be kept at the mine, for the benefit of the local shareholders.

A vote of thanks to the Chairman terminated the proceedings.

GREAT WHEAL VOR UNITED MINING COMPANY.

A quarterly general meeting of shareholders will be held at the offices of the company, Gresham House, on Wednesday.

The profit and loss account for the three months, ending with the costs for June, shows:—

May—Black tin sold	£3423	9	1	
June— ditto	3155	3	4	
July— ditto	2133	4	8	
Sundries and cash balance	4	8	6	
One year's rent of Trew tenement, to Midsummer, 1864	15	0	0 = £9731	5 7
April mine cost, &c.	£1345	8	2	
May ditto	1172	11	4	
June ditto	1188	1	5	
Merchants' bills (less discount)	1535	15	9	
Dues	520	12	8	
Sundry payments, including London expenses	279	3	4 = 6041	12 8
Balance (profit)			£3689	12 11

The cash account, made up to July 30, shows a balance at bankers, petty cash, and bills receivable amounting to 3701*l.* 17*s.* 5*d.* The auditor (Mr. William Moates) states that, having examined the cost-book to June 30 and the London books of account to July 30, he certifies the balance-sheet to be correct, and that the usual vouchers for the payments included therein have been produced. The debts on July 30 last were *nil.*

During the quarter there were 54 fms. 2 ft. 11 in. of ground sunk and driven. As the rods, &c., were changed in Ivey's shaft, there was not so much ground sunk and driven as there otherwise would have been.

ROYAL CORNWALL POLYTECHNIC SOCIETY—ANNUAL EXHIBITION.

The thirty-second exhibition of the Royal Cornwall Polytechnic Society was opened on Wednesday week, in the Society's Hall, Falmouth.

The Mechanical Department was more than usually extensive, for while in previous years two or three tables were sufficient to contain the articles that came under this head, on the present occasion five tables are required to contain them. There is not, however, much that is original, or, with some few exceptions, much that is of great value or interest. There are several machines calculated to facilitate the operations of the miners, which are likely to prove of considerable value. Among them is an appliance for lifting water and sand, or pulverised ores, from the stamps' feet, by means of the Archimedian screw, by Mr. E. Borlase, of Redruth, which is well deserving the attention of practical miners. Another really good invention in this department is Vivian's stamp lifters, the object of which is to reduce the friction of the lifts, and to facilitate the removal of any one of the stamps whenever necessary. Mr. H. Hosking's (of Hayle) hand-boring machine is also a most ingenious contrivance, and reflects great credit on the inventor; but it appears the judges entertained some doubts as to whether it was applicable to the purpose for which it was invented. Mr. S. Higgs, jun., of Penzance, contributes a new miners' safety exploring lamp, the great merit of which consists in the fact that it carries a supply of air for the use of the miner, whenever it should happen that the air in the mine is foul. Messrs. West and Co., of St. Blazey, have, for the second time, sent one of their hydraulic valves, to which was awarded the silver medal of the society last year. The one now exhibited has been in work between one and two years, working 30 strokes a minute, and 10 hours a day, without exhibiting the slightest alteration. These valves are at work at South Caradon, Wheal Phœnix, Charlestown, and other mines, and are giving the greatest satisfaction. They are said to be very superior to the India-rubber valves heretofore used. Messrs. Warden and Co., of London, have sent again Norton's V-shaped pump for the consideration of the committee, and it has this year undergone a severe test very satisfactorily, and been awarded a medal. The Messrs. Ransome and Co., of London, send a collection of articles, among which is a self-acting spanner, which adjusts itself to any size within its range. The North Moor Company, Oldham, exhibit Schelle's turbine, which, although the wheel is not more than 3 inches in diameter, is equal to the power of one man.

The Natural History Department is of considerable interest. Mr. Ashe, of Dartmouth, has sent an interesting collection of fossils from the Port Madoc slates; Mrs. Hockin, of Truro, has a valuable collection of fresh water and land shells, and their importance is enhanced by the fact of their being classified and named. Mr. S. Waters has contributed interesting specimens of native copper from Chili; and Mr. J. Phillips specimens of copper and silver ores, and of coral and shells. There are also a number of interesting cases of insects, stuffed birds, and several marine aquaria.

On the opening of the Exhibition, Mr. J. JOPE ROGERS, M.P., took the chair, and proceeded to notice the various departments. He said the committee were of opinion the exhibition was the largest and fullest the society had ever held, the contributions not only of articles sent for competition, but of those for exhibition, being more extensive than they ever before remembered. This circumstance was, no doubt, due mainly to the advantage which Falmouth now enjoyed from the possession of the railway, which was only in its infancy when the exhibition was held last year, and he trusted that as that advantage become more generally known and appreciated the importance and success of the society would increase. The increase was discernable not only in the mechanical inventions but in the ornamental and decorative appliances which had been sent from a distance; and thus the mining population of the county and persons in a humble walk of life were afforded an opportunity of inspecting those machines and articles which were calculated to be useful to them, and they were enabled to compare their own inventions and productions with what had been produced elsewhere.

The Chairman and a portion of the company then adjourned to the committee room, where the various reports were to be read. The following were among those present:—Mr. J. J. Rogers, M.P. (in the chair), Mr. R. Taylor, Mr. R. W. Fox, Rev. C. D. Saunders, Rev. J. H. Drew, Rev. T. Philipotts, Dr. Tuke, Mr. Enys, Mr. Shilson, Mrs. Shilson, Miss Shilson, Mr. R. Hunt, Miss A. M. Fox, Miss C. Fox, Messrs. G. Symonds, A. Fox, A. L. Fox, F. H. Thomas, Hewitt, F. Hill, R. Sharpe; Rev. S. Rogers; Messrs. J. Oiver, W. J. Genn, Cornish, Lieut. H. Rogers, G. Blatchley, R. T. Hall, S. Edmonds, J. P. Bennetts; Rev. J. Wallis; Messrs. R. R. Lowell, J. Stephens, jun., &c.

MECHANICAL DEPARTMENT.

The CHAIRMAN read the following report of the judges in this department:—The contributions to this department are numerous, but the exhibition does not contain any striking novelties or inventions. Mr. Crease's machine for boring and excavating rock will be tried at Messrs Freeman's Granite Works, Penryn, before the judges, and the report will be published. The practical success, or otherwise, of this invention is watched with much interest by a large number of persons in the county, it being an attempt to introduce mechanical power for the purpose of assisting or superseding manual labour in mines and quarries; and, if successful, may lead to a great saving of time and expense in carrying out the various operations necessary for the successful development of our mineral wealth. The working of the machine gave every satisfaction, and performed its work quickly and efficiently, boring through a hard block of granite in a comparatively short time. Subsequently the judges awarded to the machine the society's first silver medal, and they expressed unanimously their high appreciation of the value of the invention, and of the ease and rapidity with which the machine bored through the block of tough granite on which it was tried. It is said that one has been engaged to be put in use immediately at Great Wheal Fortune.

Another very efficient boring machine was exhibited by Mr. Hosking, of Hayle. It may be made with either one or two borers, these being so arranged that they can be adjusted so as to bore in any direction tunnels, quarries, or mines, either horizontally, perpendicularly, or at any angle required. The borer can be taken out of the hole, in order to change, without altering the angle or the position of the machine. When in operation, a fly-wheel, not then attached to the model, must be furnished to the machine, that a uniform and steady motion may be insured, and that the continuous shocks perceptible in working the model may be obviated.

No. 1 is a self-registering rain-gauge, exhibited by Mr. E. G. Wood, London. There is some novelty in the construction, and it appears likely to be useful for the purpose. The committee consider it worthy of honourable mention. No. 3, model of patent double-action centrifugal pump (Gwynne and Co., Strand). This pump has been so long known and appreciated for the purposes for which it is particularly suitable, that the committee consider any remarks unnecessary. The model exhibited is worthy of honourable mention. No. 4, turbine equal to the power of one man, exhibited by the North Moor Foundry Company, Oldham, second bronze medal. No. 5, a new racket screw wrench, by J. Hosking, of Redruth, to be worked in intricate and difficult places. The committee consider this an ingenious invention, and reward it with a prize of 2*l.* Nos. 6 and 7 are two Windsor school-desks, exhibited by Alfred Williams, Windsor, remarkable for their substantial structure, and for the ease with which they may be transformed into back seats or tables with seats; first bronze medal. No. 8, model of hand-boring machine, exhibited by a working "tutwork" man (H. Hosking, Hayle). This displays a great deal of ingenuity, and is adapted for boring holes in rocks vertically or diagonally, and may be used by the application of steam or other power. The committee cannot express an opinion as to its utility without a practical trial, but they have awarded a prize of 3*l.*, considering that this class of inventions should be encouraged. No. 15 is a patent clothes-drier, exhibited by Messrs. Kent and Co., London. This is an ingenious contrivance for use in a small space of ground. The committee desire to give it honourable mention. In Nos. 16 to 29, Mr. Kent exhibits a collection of objects for domestic use, which the committee consider are worthy of honourable mention. No. 30, Norton's V-shaped lift, force, and diaphragm pumps, exhibited by Messrs. G. C. Warden and Co., of London, adapted for irrigation, drainage, and all kinds of pumping where large quantities of water have to be lifted a moderate height. To this is awarded a first bronze medal. McCallum's patent, No. 32, rifleman's distance indicator, is a useful invention for ascertaining the distance of an object, and the committee consider it to be entitled to honourable mention. No. 33, Clark and Co.'s patent self-coiling wood shutters, being in general use.—Honourable Mention: Nos. 35 to 46—the Silicated Carbon Filter Company here exhibited several of their filters, Dahlke's patent, as in use at the metropolitan drinking fountains, to which has been awarded a 1st bronze medal. Nos. 47 to 54, Messrs. E. Dent and Co., 69, Strand, London, exhibit several mariners' compasses, meridian instruments, aneroid barometers, turret clocks, &c., which the committee consider entitled to honourable mention for excellent workmanship. The high reputation enjoyed by this firm for all these articles is well known. No. 55, Messrs. H. E. Ransome and Co., of the Strand, London, exhibit a self-acting spanner, which immediately adjusts itself of its own accord to any size nut within its range. The committee consider this to be an admirable invention, and have awarded it a first bronze medal. In No. 59, they also exhibit a patent tube cutter for steam and gas tubes, which is approved by the committee, and a second bronze medal is awarded. No. 70.—Mr. T. Coad, of Falmouth, exhibits a model of a self-acting railway tunnel signal for preventing two trains from being in the tunnel on the same line of rails at the same time. The committee do not express any opinion as to the practical working of the machinery, but for the ingenuity evinced they awarded a prize of 1*l.* 10*s.* No. 71 is a fancy time-piece by Mr. Coad, Falmouth, to which is awarded, for workmanship and elegance of design, a prize of 1*l.* 10*s.* No. 72 is Forrest's patent measuring apparatus, for drawing off and measuring liquids. The committee consider this a useful invention, as preventing waste, and of great safety for paraffine and other inflammable liquids, and have awarded it the second bronze medal. Nos. 73 and 74.—Mr. Samuel Higgs, jun., F.G.S., exhibits a safety exploring lamp, the object of which is to provide a good and safe light in exploring the dangerous parts of coal mines, or in case of accident to ensure a continuous light in coming to the relief of any unfortunate miner who may be shut up in any of the galleries. To provide for such a light, atmospheric air or other gas is condensed in the cylinder by the ordinary air-pump. The flame of the wick is supplied as circumstances require, by means of a screw valve. The committee consider it to be adapted for the intended purpose, and award it a first bronze medal. No. 75.—Stand of parlour and miniature bellows, exhibited by Mr. Davidge, of Falmouth, an old contributor to the society, is awarded for workmanship a prize of 10*s.* No. 76.—Case containing small screw stocks, dies, &c., exhibited by Mr. J. D. Waddy, and commended by the committee for good workmanship. No. 79, is an artificial fore arm, exhibited by Thomas Learwood, of Truro, is commended by the committee, and awarded a prize of 1*l.* No. 82 is a model of a house, and is commended, with a prize of 7*s.* 6*d.* Nos. 83 and 84.—Mr. S. Terrill, an improved cooking apparatus, in several of the details highly commended by the committee, who awarded a prize of 2*l.* No. 90.—Drawings of marine steam-engines, by Messrs. Paul, of Liverpool, with annular frictionless slide valves. The drawings are well executed and ably explained by Mr. Paul. The committee awarded a prize of 1*l.* for them, without expressing any opinion on the practicability of the plan.

Mr. R. TAYLOR then alluded to two or three of the machines in the exhibition. Boring by machinery had long been one of the most desirable objects of enquiry and experiment that had engaged the attention of mechanics: but, although many attempts had been made to accomplish this, yet hitherto in this country they had never proved successful, or, at all events, they had never been adopted by the mining community, which was, therefore, a proof that they had never been successful. In a neighbouring country, however, these machines had been employed in boring the tunnel through the Alps, for the railway between France and Italy. That tunnel had made considerable progress, and the boring was effected at both sides by these machines, which, he believed, were the joint production of French and Italian engineers; at all events, the machines and the boring were under their joint superintendence. It would be impossible to give an explanation of the principle and construction of the machines without the aid of drawings; but he might state that the power first employed was derived from a stream of water near the entrance to the tunnel, which conveyed to them in the tunnel the compressed air with which they were worked—that was, the water first put in motion the machinery which pumped the compressed air, and this was forced into pipes, and conveyed to the machines, which it sets in motion by acting on the cylinders that drive the borers. Having produced the required motion, the air then escaped into the tunnel, and exercised a most beneficial effect, by expelling any foul air that might have collected there. The advantages of the principle or invention were very great. In the first place, the engineers were enabled to avail themselves of cheap powers, such as water and air, instead of steam. Then the tunnel was ventilated by the escaped air, which was a very great advantage. Hitherto, however, there had been one great difficulty or objection attendant on the employment of the machines; for, although the work of excavation was done very rapidly by them, it was accomplished at very great cost. In passing through the excavation of the tunnel along with Mr. Brassey, the able engineer and contractor, that gentleman stated that the machines got through the work twice as fast as it could be done by hand, but the cost was twice as great. A very able report had been published of the machines, which described fully their construction, and furnished ample details as to the mode in which they were applied, the cost of working them, &c. When he said they were the only successful machines of the kind that had been yet employed, he was far from wishing to state that Mr. Crease's machine, which would be exhibited next day, would not be successful. He had seen Mr. Crease's machine in action, and he must say that it displays considerable ingenuity in its construction, and that many of the difficulties which would suggest themselves to a mechanic had been cleverly overcome. What its advantages would be he was not prepared to say, because the question involved was one mainly of expense. The difference between the machines he had referred to and the machine of Mr. Crease's was that the former were worked by water and air, while his was intended to be worked by steam. He thought that where water could be obtained and air applied, it might be applied, as was done in the case of the Mount Cenis machines. There was also a hand-boring machine in the exhibition, by a Cornish miner; but he had merely seen it on passing through the hall, and he must confess he did not see that much advantage would be obtained by the employment of a hand-boring machine over the old method of the tamping iron and mallet. The next article he should notice was a rain-gauge, and he must confess that he was not able to see its advantage. It had a glass tube at the side which, it was said, would indicate the quantity of rain that fell; but this was not a novel plan, having been adopted before. It appeared to him that it would not register correctly the quantity of rain which might fall in this county and in many other parts of England during a season. Mr. Taylor then described a rain-gauge, upon an ingenious plan, which had been invented and used by his father; and, in conclusion, he observed that a self-registering rain-gauge was an instrument of great importance in districts where water was employed in the operations carried on. It was also of interest on another ground. The quantity of water which found its way to the bottom of the mine from the surface was very considerable. He remembered that in the United Mines, in Gwennap, the quantity of water which had to be pumped from the bottom was greatly affected by the quantity which fell at the surface; and he had known in a mine in North Wales, after heavy rain, the water to rise almost as fast as the men could climb up the ladders.——The Rev. S. ROGERS: What was the rock there?——Mr. TAYLOR: Limestone. He might explain that the limestone was found to be traversed by what would be called in this county cross-courses, or veins. In one of the mines they found in one of these veins, or cross-courses, 80 fms. below the surface, nuts and an oak tree. In wet weather these cross-courses became rivers; but in dry weather they acted as drains. No. 4, Shiele's patent turbine, was a little machine, to which he thought the attention of miners ought to be drawn. It was very little used in Cornwall; but he was of opinion that it might be adopted more generally, with considerable advantage. Mr. S. Higgs's lamp was an invention of considerable importance, and, if the judges thought that it would answer the purpose intended, it was deserving of a high reward. It appeared to him that it would contain a sufficient quantity of air to enable a person to pass a considerable distance in a mine.

Mr. R. HUNT said that the lamp had been spoken of in terms of high commendation by Mr. M. Dunn, the Inspector of Mines at Newcastle. He had been informed by Mr. Dunn that the air contained in the lamp was sufficient to maintain the light in it for half-an-hour, and, therefore, it must prove of great advantage.

Mr. TAYLOR thought that if the judges had been furnished with the information which Mr. Hunt had just given them respecting the capability of the lamp, they would have awarded to it a higher prize than the first bronze medal. It was a matter, however, which they were now competent to remedy.——The CHAIRMAN said that it rested with the judges.——Mr. BENNETTS explained that the judges did not feel themselves competent to make a comparison between this and other lamps; but they were of opinion that the arrangement for carrying, for some time, condensed air was a very valuable invention.——Mr. R. W. FOX said it was the opinion of the judges that the air carried was not sufficient to last anything like half-an-hour.——Mr. HUNT said that Mr. Dunn was of opinion that life would have been many times saved in coal mines had they possessed such a lamp. (Hear, hear.)——The CHAIRMAN suggested that the judges and the committee should take into their consideration whether this was a case in which an alteration ought to be made in the prize which had been awarded.——Mr. R. W. FOX, one of the judges, considered that the change ought to be made at once, and the other judge present concurring, the first silver medal of the society was awarded to Mr. Higgs's lamp, instead of the bronze medal.

The following are the awards in the Mechanical Models and Drawings Departments:

SILVER MEDAL.—Safety exploring lamps (S. Higgs, jun., Penzance).

FIRST BRONZE MEDALS.—Improved Windsor school-desks, which transform into back seats or tables with seats (exhibitor, A. Williams, Windsor); Norton's V-shaped pump (G. C. Warden and Co., London); various filters (Dahlke's Patent Silicated Filter Com-

pany, London); patent self-acting spanner, which immediately adjusts itself of its own accord to any size within its range (Ransome and Co., London).

SECOND BRONZE MEDALS.—Schiele's patent turbine, equal to one man's power, worked by towns' water (North Moor Foundry Co., Oldham); patent tube cutter (Ransome and Co., London); Forrest's patent drawing off and self-measuring apparatus (Slade Oliver, Falmouth.

MONEY PRIZES.—3*l.*, model of hand-boring machine (H. Hoskings, Hayle); 2*l.*, improved ratchet spanner for working particularly in confined places (J. Hosking, Redruth); 2*l.*, improved cooking apparatus (S. Terrill, Redruth); 1*l.* 10s. each for a model of self-acting railway signal to prevent two trains being in a tunnel at the same time on the same line of rails, and a model of skeleton 8-day timepiece (T. Coad, Falmouth); 1*l.*, artificial forearm (T. Learwood, Truro); 1*l.*, for drawing sketch of marine-engines with annular frictionless slide-valves (A. and F. Paull, Liverpool); 10s. for workmanship, stand of parlour and miniature bellows (J. Davidge, Falmouth); 7s. 6d., model of house (W. J. Bosher, Redruth); 2s. 6d., fowling-piece with new stock and two sights, by a poor man.

HONOURABLE MENTION.—Self-registering rain gauge, and Hanbury's self-acting machine for washing photographic pictures (E. G. Wood, London); stand of articles of domestic use (Kent and Co., London); rifleman's distance indicator (D. McCallum, Plymouth); model of patent self-coiling wood shutter, adapted for private houses and shop fronts (Clark and Co., London); stand of articles, by Dent and Co., the watch and chronometer makers, of the Strand; case containing small screw stocks and dies and taps, ratchet brace, models of spanners, &c. (J. D. Waddy, Sheffield).

NORTH OF ENGLAND INSTITUTE OF MINING ENGINEERS.—The general monthly meeting of members was held at the Institute, Newcastle-on-Tyne, on Sept. 3. In the unavoidable absence of the president (Mr. N. Wood), the chair was occupied by Mr. T. E. Forster, vice-president. Several new members were elected and others proposed, after which a discussion took place on the desirability of holding a general meeting in some eligible locality in the south-west of the country. The further discussion of this question was postponed to the next monthly meeting.—Mr. Daglish, after some introductory explanations, recommended that the next meeting should be a special one, in order that the members might discuss the advisability of altering the rule relating to the number of the council, as he wished to move a resolution:—"That in future all vice-presidents, on ceasing to fill that office, shall become *ex officio* members of the council." This recommendation was adopted by the meeting. A short discussion on Messrs N. Wood and E. F. Boyd's paper on the "wash" through the Durham coal field took place. The discussion was introduced by some additional observations forwarded by the president, Mr. N. Wood. In the concluding part of this paper it was suggested that a committee should be appointed, or that the council should undertake the task of collecting all the sinkings through the superficial deposits from all the collieries of the district, so that a correct record might be obtained of these deposits of clay, sand, &c., which would be very useful both for practical and scientific purposes. As the Ordinance Survey gives the levels, he (the president) thought that a very complete account of the boulder clay deposits at different localities might be obtained. The Chairman said that the suggestion made regarding the sections of the boulder clay was most valuable, and would meet with the general approval of the members. After some further discussion of the same subject, the meeting separated.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

There has been more activity in the Mining Share Market this week than for some time past, and it is the more satisfactory as the business appears to be wholly independent of the transactions in connection with the usual fortnightly settlement, which takes place on Thursday. The account, which was rather light, passed off with a fullness of stock for delivery.

WHEAL SETON and WEST SETON have been dealt in, but prices have fluctuated; the former, however, left off firmer.—SOUTH CARADONS have been in request.—CLIFFORDS have changed hands at higher rates, with a firmer tendency.—EAST BASSETS are sought for at improved prices.—TINCROFTS are not so firm, being more freely offered.—EAST CARN BREAS are being sought for, at buyers' prices.—SOUTH CONDURROWS have been enquired for, at lower rates.—NANGILES and COOK'S KITCHEN are very quiet.—WEST CHIVERTON and CHIVERTON are heavy, at present prices, and but little doing.—EAST GRENVILLES shares fluctuated, but left off better.—WHEAL GRENVILLES are rather quiet, but firm at present prices.—NORTH TRESKERBYS have been in good demand, with a corresponding advance in price.—NORTH CROFTYS are offered at lower rates.—POLMEARS are less active, and more freely offered.—CARN CAMBORNES have been in better request, and prices advanced.—WEST STRAY PARKS have changed hands at nominal prices.—GREAT NORTH DOWNS have been in demand, in consequence of a reported improvement in the mine.—GREAT SOUTH TOLGUS have been sought for, at buyers' figures.—HALKENBEAGLES have fluctuated, and left off quiet.—GREAT WHEAL BUSYS find buyers at nominal prices.

EAST WHEAL LOVELLS have been rather extensively dealt in this week, and prices have advanced, leaving off firmer.—PROSPER UNITED and SITHNEY AND CARNMEAL have been enquired for at minimum rates.—GREAT WHEAL VORS have been in better demand, and prices improved.—MARGARETS continue heavy at present prices.—PROVIDENCE MINES are rather better.—MARGERYS have been enquired for at nominal prices.—NEW ROSEWARNES are in demand at higher rates.—EAST CARADONS have freely changed hands, but prices have fluctuated.—MARKE VALLEYS continue inactive.—NEW MARTHAS have been done at minimum quotations.—KELLY BRAYS have been rather extensively dealt in at nominal figures.—HINGSTON DOWN, EAST RUSSELL, and CREBONS find buyers under quoted prices.—An active enquiry has sprung up for PRINCE OF WALES, in consequence of a reported improvement.—NORTH DEVONS have changed hands at lower rates.—KELLY BRAY: An improvement is reported to have taken place in the western part of the mine. In sinking the winze below the 25 the lode is represented as worth 40*l.* to 50*l.* per fathom.—PRINCE OF WALES: There is rumour that some improvement has taken place in this mine, which has caused an active enquiry for the shares at an advance.

LEAWOOD MINE, some years since, was worked under the name of Wheal Fanny, is situated near Lidford, which parish commands a large portion of the Forest of Dartmoor, and from time immemorial has been worked most extensively for tin, the whole forest, or moor, being traversed by lodes which are highly mineralised. Lidford was one of the few stannary towns, and the great depôt of that mineral raised by the ancient tinners. The Castle of Lidford still exists (although in a ruinous state), was the court and place of confinement of all transgressors of the stannary laws of the ancient tinners of Devon and Cornwall, thus showing the importance of the district for tin when that metal only was sought for, some centuries ago. The whole country, perhaps, is not less metalliferous now than then. Wheal Fanny was taken up under the most favourable circumstances, and the prospects were considered as "second to none," and although discoveries were made both in copper and lead, with every indication of becoming profitable in depth, the mine was abandoned, from the fact that the engine was not adequate in power to keep the water, and the indisposition of the company to erect more powerful or suitable machinery. A new company has been formed, and a large and efficient engine is in course of erection, under the title of the Leawood Mining Company, whose prospects are considered of the most encouraging character. The recent underground operations consist of clearing up the adit level, and the several places opened on during the last workings. The copper and lead lodes present the most encouraging appearances, and some good work has been broken from the different levels.

CALSTOCK CONSOLS.—The prospects here are, it appears, assuming a most encouraging and cheerful appearance. From the recent discoveries, made through the perseverance of some of the adventurers, there is every reason to hope that ample remuneration will be afforded to those who have for 12 or 14 years patiently borne the burden and its gloominess. More than 30 years ago I heard the opinions of some of the soundest and most experienced practical agents of the locality expressed in the highest terms of what they believed Danescombe would do, and their views were of some weight, for they have since managed to bring to great wealth, under the most discouraging circumstances, some of the most prominent mines in the eastern division of Cornwall, and commenced at a time when there was scarcely a mine in operation between Fowey Consols and the River Tamar. After this unintentional digression we will refer to an independent statement received this morning. At the junction of the engine lode with another lode east they have a deposit yielding 3 tons of copper ore per fm., the whole looking remarkably well for further improvement. They have also a most promising lode, 18 in. wide, in the western level, yielding good stones of ore; this level will shortly come under the large gossan lode discovered some time since in the railway cutting. The south cross-cut is in favourable ground, driving to intersect the Okel Tor lode, which is so productive at present, and will cut it about 45 fms. from surface. Operations are being directed to the Danescombe lode west, where it is known to be in an excellent channel of ground, when a great improvement is expected.

GRAMBLER AND ST. AUBYN is reported to have improved in the 84, east and west of the engine-shaft. East it is worth 1 ton, and west ¼ ton per fm., and looking well for further improvement. The 72, west of Tregellas's shaft, is in a large lode, 6 ft. wide, and looking well for early improvement. At the 60, 12 fms. ahead of this level, they are sinking a winze in a large lode, with a leader of rich grey ore, yielding about 1 ton per fathom. There are several other points to which operations are being directed, which when completed will open up some very important and promising ground. Upon the whole, these mines have very much improved. At a recent meeting a division of the two mines was resolved upon—the eastern part, or St. Aubyn sett, to be worked distinct from the former, and to be in future called the EAST WHEAL GRAMBLER, which is represented to be 450 fms. long and about 100 fms. wide. There are four known lodes traversing the sett, one of which has proved productive; indeed, the whole are of a most promising character, with two or three cross-courses intersecting the lodes, which are deemed great advantages. Operations will be commenced immediately, and to prosecute the works a call of 10s. per 486th share has been made.

WHEAL KITTY (St. Agnes) continues to look very well, especially on Pryor's lode. The several levels in course of driving are opening up excellent tribute ground, with every prospect of early improvements in some of the ends; the aggregate value of the ends on that lode, including a winze sinking below the 34 fm. level, is estimated at 70*l.* per fathom for tin. There are several important points to come off shortly, when the returns will be greatly augmented.

At WHEAL MARGERY the prospects are of an improving character, and very likely to become a profitable and paying mine. It is gratifying to see the remarkable change which has taken place in this property, for it is very little more than 12 months since the abandonment of the mine was seriously entertained, from the poverty of the levels and general unfavourable appearances of the lodes in the several points of operation. The chief returns are from the American shaft, where they are down 3 fathoms under the 132, in a very promising and paying lode. Wellesley shaft is in course of sinking to the 120. The ends here are looking better for tin, and approaching under the old tin workings. At American shaft the chief operations are between the 100 and bottom levels; and, although the ends are not rich, they are opening ground that can be taken away at a very easy cost, as well as low tribute; consequently, profits are now being made, and there is every probability that the current four months will give increased returns. The profit on the last four months is shown at 87*l.* 6s. 8d.; the last two-monthly sale, on the 8th inst., realised 112*l.* 6s. 4d., as well as about 80*l.* worth of tin. The aggregate value of all the present productive places is given at 152*l.* per fm.

COLENSO.—The prospects here are represented of a very encouraging character, the lodes improving as the operations progress. During the last week several improvements have taken place, both in the tin and copper lodes. The shaft sinking on No. 5 lode, which is down nearly 20 fathoms, is in a very productive lode, 3 ft. wide, and worth 20*l.* per fathom for tin. No. 4 is a copper lode, and the shaft is down 8 fathoms in a good and promising lode, yielding excellent stones of copper ore. The deep adit which is being driven will intersect the lode 33 fathoms from surface, and from the general character of the lode in the shaft great results are anticipated at that depth.

EAST WHEAL LOVELL.—No change is to be noticed in this mine, further than that they are progressing with the new shaft rapidly and satisfactorily.—At WHEAL PROSPER (Breage) they have not yet intersected the Trewavas lode in the 40, but they have an increase of water, and the ground has become more strongly mineralised, numerous small branches of ore coming in the end, which are deemed highly favourable features. They are now breaking some good tinstuff from the 40, both east and west.

BRYNTAIL.—A very important discovery is daily expected here by the intersection of the lode by the cross-cut. At the 20 they had a fine course of ore for upwards of 15 fms. in length, and sunk a winze for several fathoms, until driven out by the influx of water, and the lode proved richer in the bottom. The cross-cut will take the lode at the 30, and no doubt drain the winze at once, and open a good run of lead ground, which will prove a valuable acquisition. There are other points looking very promising, but the above is one that should not be overlooked by those interested.

At GREAT DARREN the prospects continue to improve daily. The recent discovery in the 15 has become an extraordinary course of ore, and although they have gone 16 ft. through the lode they have not got both walls as yet; some of the leaders are large and solid, and there is very little doubt that in a few fathoms further driving they will open on a vast body of silver-lead. JAMES LANE.

From Mr. JAMES CROFTS:—The public have yet heard only partially of a lead mine in Devonshire introduced under the name of LEAWOOD, and at present in the small number of 24 shares. In the year 1850 this mine was worked under the name of Wheal Fanny, in compliment, the writer believes, to one of the family of Mr. Josiah Hitchins, the discoverer of the Devon Great Consols, and to whose able management the mine was confided, Mr. J. H. Murchison being the secretary, as he is now of LEAWOOD. From memory, and from other data, the writer is able to give a short history of the mine, which he thinks will prove acceptable and valuable to such of the mining public as may be disposed to embark their capital in the shares. The Wheal Betsy, which thirty years ago was perhaps the richest lead mine in England, but certainly in Devon or Cornwall, had a lead lode said to have been in places 3 ft. wide, of solid ore, and the returns of the mine were large enough to justify the company erecting their own smelting works on the property, but in course of time the decline in the value of the ore led to its stoppage. Wheal Betsy, however, is again at work. These details are given for the purpose of showing the value of LEAWOOD, one of the lodes in which is believed to be that of Wheal Betsy. Both mines are situated about twelve miles east of Tavistock, and near Okehampton, in Devon. It is worth noting as a coincidence that while the West Chiverton Mine is an emanation from the defunct East Wheal Rose in Cornwall, so is Leawood to Wheal Betsy in Devon. Besides Mr. Josiah Hitchins, Captain Wm. Lean, of Holmbush (in 1851), and Capt. Opie (since deceased) reported upon the value of Wheal Fanny in the most flattering terms. A most important indication of ore was an immense mass of the most beautiful gossan, exactly similar to that found in the original shaft of Devon Consols; and in 1854 this gossan was tried by one of Berdan's (imperfect) machines, which yielded about 2¼ ozs. to the ton of gossan, but whether gold can be obtained in a remunerative quantity is a problem which only future experiments can solve, but the tangible mineral is lead and (it may be) copper also. A recent report from Captain James Richards, the managing agent of the Devon Consols, to one of the shareholders is most important. The following is an extract:—

"As I have often told you, I have the greatest possible confidence in the success of this mine, if properly tried; and it is my firm belief that there is an abundance of lead ore in connection with the splendid indications presented at the surface. As far as my judgment goes, I do not believe that anything more encouraging can possibly be seen, and I should very much like to see it tried. There is a good deal of water there, and I think it will require an engine of not less than 60-in. cylinder to keep it properly under control; but this should be a very trifling consideration in connection with such prospects as are held out by this strong, promising, masterly lode."

In consequence of this and other reports of a like character (some items of which are that a very large lead lode runs through the entire length of the sett, that there are also two copper lodes, on one of which copper ore was raised in the last working, and a never-failing stream of water for dressing purposes), it is scarcely admissable that the new attempt to realise great wealth from this mine can prove otherwise than successful. Vigorous operations were commenced some months ago. The adit has been cleared, and a pitch set on the lead lode at 13s. 4d. in 1*l.* tribute; a new 60-in. engine purchased, now in course of erection, and expected to be at work in a few weeks; and from present appearances the results are likely not only to be very quick and important, but to be arrived at with a small outlay. In addition, the writer is authorised to state that the present 24 shares will be so multiplied in number as to give a very large bonus to those who may be fortunate enough to secure an immediate interest in the mine, the whole of the shares having been subscribed for many months ago, the fact being that so favourable an opinion was entertained of Wheal Fanny on its introduction to the market that the shares were largely purchased at the rate of 10,000*l.* premium for the mine, and a considerable sum was given to the freeholder for the chance of half the dues; and thus it would appear that a more *bona fide* and unexceptionally good mining property, promising such early results as a consequence of the perfect maturity of preliminary operations on all important points, can scarcely be offered, however respectable and experienced may be those who undertake to enlighten the public on mining matters from time to time through the columns of the Journal.

From Mr. EDWARD COOKE:—There has been more business doing than for some time past, and the market shows a tendency to a favourable reaction. The stringency of the money market has, reasonably, had its usual effect on the feelings of the public with regard to wholesome speculation. Confidence will, it is to be hoped, be soon restored, and a peaceful termination of the American war (however it may influence other interests) will certainly benefit the metal markets to an enormous extent. Thus a better price for minerals would follow, whereby the profits of the various mines would be greatly enhanced. I consider, therefore, the present is a good time to buy into legitimate mines, whether dividend or progressive. Many of the latter class could be selected, which would incur no responsibility of calls for a long period, even if any should ever be required at all. Among those I would mention EAST WHEAL VOR, CHIVERTON MOOR, NORTH CHIVERTON, PROSPER UNITED, and SOUTH DARREN; the latter is a limited company, and about paying its working expenses by returns both of lead and copper. Some of the others named are developed to a considerable extent, and nearly paying costs, while the remainder have large balances, sufficient to work the mines to a considerable extent. Among the dividend mines I would select TINCROFT, TRELAWNY, BIRCH TOR AND VITIFER, FRANK MILLS, WHEAL KITTY (St. Agnes), WEST CHIVERTON, and GREAT WHEAL VOR; the two latter-named mines are, I think, unquestionably the richest for tin and lead respectively that Cornwall has ever produced. GREAT VOR has lately opened up immensely rich for tin, which augurs well for the district. One of the adjoining mines, EAST WHEAL VOR, will, by-and-bye, come into more prominent notice. That the market is dull just now for the shares is no criterion of the merits of the mine; everything is going on well, and soon there will be a parcel of tin in the market for sale, with an unexpended capital of some 4000*l.* to 5000*l.* in hand, and engines and all other machinery paid for. NORTH CHIVERTON is now becoming to be appreciated. A more legitimate or promising mining property than this has never been brought before the mining public; the shares are honestly worth double the price they are selling at.

EAST LOVELL shares have been in good demand. The shaft is progressing very favourably, but will take about two months longer to finish, and until that is completed the returns of tin will be of a very limited character. At the meeting a considerable loss will be shown upon the four months' working, consequently dividends cannot be resumed for a lengthened period. It is to be regretted that the shareholders at the last meeting were led to expect that a 10s. dividend could be maintained. Of course no manager of a mine can be accountable for such a failing off in its prospects as has taken place in East Lovell. Let us hope, however, that when the shaft is completed an increase of returns of tin will take place, and profits resumed, which will, no doubt, be the case if the tin extends east and west of the shaft. CHIVERTON MOOR shares should now be steadily bought. This mine can scarcely fail to become a great lead mine. The richest lodes in WEST CHIVERTON are in the western part of the mine, and which adjoins Chiverton Moor sett; and although West Chiverton is only paying 15s. per share quarterly at present, the time will come when double that amount will be paid. It is, undoubtedly, the richest lead mine in Cornwall, if not the richest that ever that county produced. LEAWOOD MINE will cause an excitement, and be an encouragement to legitimate mining. The lodes are considered very splendid ones; and as the new 60-inch engine will soon be at work, they will be opened on at a fair depth without loss of time, and very important discoveries are looked for.

From Mr. WILLIAM LELEAN:—Mr. Edward Davies, of Dolcæradog, has, it appears, been waiting for some time, in hope that "a more able pen" than his own would have entered the lists in defence of Welsh gold mining; but, having waited in vain, he has, at last, "screwed his courage to the sticking place," and "rushed into print." I do not think that his gold mining friends in Wales will thank him for what he has done. Having referred to Mr. Hunt's Mineral Statistics, and "the Thunderer's own roar," as having united to show that "Welsh gold mining cuts a very sorry figure, indeed" (these are all Mr. Davies's own figures), he quotes the remarks which I threw out upon the subject, some three or four weeks ago, and speaks of me as having "joined in the general denial of this important branch of British industry." Now, I did not deny "the industry" that has been expended on gold mining in Wales, I only referred to the very small rewards which that industry had reaped, a circumstance which Mr. Davies does not take upon himself to deny, although he construes my remarks into "as heavy a dash of cold water as any yet thrown on Welsh gold mining." I have merely stated facts, all of which facts Mr. Davies admits; but he excepts to my assumption, that the expenditure in obtaining the 552 ozs. of gold—the result of last year's industry—"must have been very large." The expenditure, he says, was not on "mining for gold proper," but on the "Battle of the Machinists," which it will, no doubt, be a very satisfactory thing for the shareholders in the several companies whose directors have been thus amusing themselves to be informed of.

Mr. Davies alleges that 1863 will be known in the annals of Welsh gold mining as the year of the "Battle of the Machinists!" "During the year 1862," he says, "the success of Clogau was so splendid—20,000*l.* and upwards profit on the year—300 ozs. of gold a week, a mere bagatelle—specimens of gold quartz rivalling all parts of the world in richness, and all extracted through the hitherto neglected Britten and Berdan processes, and for which John Parry got the Exhibition medal, 'as being the first successful and profitable result of gold mining in Great Britain.'" The success through Britten and Berdan's process was so great, the proceeds "rivalling all parts of the world in richness," that—what will the reader suppose?—in the autumn of that year "Berdan's machines were knocked down like ninepins; and after that, numberless machines and processes for extracting gold were proposed, offered, advocated, accepted, put up, and the majority of them on the nothing-like-leather principle. No sooner up than they were down again; they would not do. That is a brief history of the past two years; but, as I before stated, the year 1863 was the year of the 'Battle of the Machinists.' Do not be surprised at the golden results being only 552 ozs., 1747*l.*" That is Mr. Davies's account of "this important branch of British industry" in Wales during the year 1863; and if it is anything like a correct account, I shall feel more satisfied than ever at having saved some of my clients' money, by dissuading them from investing it in gold mining in Wales.

But, says Mr. Davies, "There's a good time coming, boys; wait a little longer!" "Never again," he believes, "will Welsh mining experience so disastrous and impoverished a year as 1863." "You may dissolve a dozen Dolfrwynogs, and shut up a host of St. Davids'," he avers, "but Welsh gold mining will now work its way onwards;" and if we may take his word for it, he has good grounds for his confidence. He says—"The readers of the Journal may believe the fact or not, but Merionethshire is a county where there are quartz veins *literally overflowing* with gold. That is *not overstating* the case, as they may go and test them at random, and in every ton of quartz broken, even on the very surface, a perceptible quantity of gold will be found, from 1 to 2 dwts. per ton." As I am not one of those referred to by Mr. Davies, who "view Welsh gold mining as antagonistic to copper, lead, or tin mining," I shall be delighted to hear of all his golden dreams being realised. Facts are facts, however, as the acute logician remarked, and looking only at the facts, as far as we know them, and as they are uncontradicted by Mr. Davies, I must for the present advise my friends to pause before they venture into the Welsh gold fields, in the hope of picking up one of those magnificent prizes which Mr. Davies avers to be there.

Another of your correspondents, "Cornubiensis," objects to my having congratulated Mr. Trevethick upon the value of his suggestions touching the German mine with a long and unpronounceable name, which the Pirna Magnetic Iron and Copper Company is asking Englishmen to purchase at the sum of 85,000*l.* "Cornubiensis," however, says nothing that should induce me to alter my judgment. "Are the exorbitant demands of promoters," he asks, "limited to German mines, or are they not common to all mines out of England?" He must forgive me if I cannot see how that helps the matter as to the German mine. The cost of the Saxon concession, he says, is merely nominal, and "it may be difficult to explain the reason for demanding 85,000*l.*" in exchange for it. I think so, too; and I hope that none of my friends will contribute towards it. "Cornubiensis" is aware, he says, that no Anglo-German mining companies ever returned any profit to Englishmen, "but they have to Germans." So much the better for the Germans, so much the worse for the English; and so much the more cautious should they be when Germans ask them to purchase a mine at their valuation of 85,000*l.*, albeit "the cost of the Saxon concession is merely nominal." Let "Cornubiensis" understand that I did not "complain" of the Pirna asking 85,000*l.* for the mine; I merely suggested that the money might, as I confidently believed, and still believe, be much better invested in English mining. There are mines here of tin, lead, and copper—some paying good dividends, some demonstrably progressing towards that desirable result—into which Englishmen having but moderate sums of money to spare may purchase, certainly without loss, probably with large profits. Why should they prefer to these an adventure in a country whence Englishmen have never yet, as "Cornubiensis" admits, derived any profit? The Germans have hitherto acted towards Englishmen as the lawyers are sometimes slanderously said to act—eat the oyster themselves and present the shells to their clients.

There is nothing particular to notice in the English or Welsh mines. The market, if not quite so dull as it was, is not very animated, but still invites purchasers by the prices at which shares in a few good mines are to be had. The GREAT SOUTH CHIVERTON goes on as well as hitherto, as do also the EAST LAXEY, the NORTH MINERA, and the GOLCH HILL. The BEDOL-AUR presents a particularly encouraging appearance, yielding well at present, and promising much better within a very short time. There is a rich sample of lead-stone now before me, and an increase in the quantities daily obtained is reasonably anticipated. The GREAT LAXEY declared another dividend—10s. per share—at its meeting, on Thursday last.

FOREIGN MINES.

COPIAPO.—CHECO MINE: Estimated produce for July:—

Class.	Quantity.	Quality.	Price.	Value.
Second class dark ore	290	25	$2·50	$725
Third class ditto.....	190	12	Rls. 6¼	206
Fourth class ditto	64	10-11½		
Total	544			$931

In the 70 fm. level, east of Price's shaft, the lode in the chiffon, stoping, and sinking east is much the same as when last reported; no change in the ground as yet; driven since our last 2½ metres. The stope in the back of this chiffon is not altogether so good as when last reported. In the 60 fm. level cross-cut, at Price's shaft, driving north, the ground is still very hard for driving; driven since our last report 1 metre. In the 60 fm. level chiffon, at Price's shaft, the lode is greatly improved since our last report; we do not as yet know the width of the lode. We are carrying our working 4 ft. wide, all of which is ore o fabout 7 per cent., and producing some rich stones of metal; here we are in daily expectation of a bunch of ore. This is more than ever was met with before at such a depth on this lode, and it is very encouraging indeed; we shall be able to let you know more about it in our next; sunk since our last 3 metres. In the 60 fm. level, at Price's shaft, we shall now commence to drive an end west on the lode from the bottom of the chiffon, and continue to sink the chiffon east, to open ground, as it is looking so favourable.—Western Sett: In the 40, north of the new shaft, the lode in the end driving west is still much the same as when last reported; driven since our last report 2 metres.—GEORGE MATTHEWS.

DULCINEA.—July 28: The bottom stope continues rich, with a vast improvement at the bottom for 15·80 metres in length, with an average width of 3 ft. of ore, in rod and black vogues; the bridge of metal spoken of in our last report is about to be concluded, so that the south end will be commenced. In the bottom end north we have commenced to cross-cut winze from the bottom stopes; here the lode has become squeezed, although the ore still continues, but narrow; driven this month 3·10 metres—width of metal 12 inches. The 25, driving south, has been poor; the lode produces a few stones of ore; driven this month 2 metres. The cross-cut winze continues rich, with a vast improvement; the lode in this winze has undergone a change, becoming wide, with red and black vogues, also damps, with a promising indication to become solid in metal; driven during this month 6 metres; width of lode, 3 ft. In the north chiffon we have cut the east branch, but were disappointed in not meeting metal. Now we intend sinking on the east lode, as the ground is soft, and speed can be executed; cross-cut driven 6·70 metres. The south sett chiffon, sinking south, still continues as last reported; the lode has become more compact; driven this month, 5·90 metres.—R. MACKAY.

RHENISH CONSOLS.—G. Sweet, Sept. 9: Bliebach: The engine is set to work at Wright's shaft, and the water is nearly drawn out; I hope to-morrow to recommence its sinking. The lode in the end driving west, on the north lode, is at present small, and not so good as it has been, yet I hope it will shortly improve. We have commenced stoping the back, where the lode is worth 70 thalers per lachter (10*l.* 10s.); price for stoping and bringing to the surface, 16 thalers per lachter (2*l.* 8s.) We are now making good progress in sinking Ashley's shaft. The end driving west on Christiania lode will produce 20 centners of lead ore per lachter. The wheelwright is well on with the new wheel, but the bad weather during the last week has hindered the masons from getting on with the loading; I hope, however, it will be finished by the time the wheel is ready. The rods, carrier-wheel, &c., are also being made.—Fahrenberg: The new east and west lode still continues very regular, being now extended on its course about 10 lachters, and some parts of this drivage will produce 30 centners of lead per lachter, other places not above 10 centners. We have six men driving, and have commenced stoping the back with two men, but intend to increase. The lode at Louisa is presenting a better appearance than I have before seen at the bottom of the new shaft. I intend to go to James Watt to-night, and will report upon that mine from there to-morrow.

LUSITANIAN.—Sept. 3: In Taylor's engine-shaft, below the 80, the lode is 4 feet wide, the south part of which is quartz, and the north part is a branch of ore worth 3 tons per fm. In Perez' shaft the men are cutting a plat in the 28, where the ground is very hard. The lode in the 80, east of Taylor's, contains stones of ore, but is still unsettled. In the 80, west of same shaft, the lode is composed of dry schist. The lode in the 70, east of River shaft, is composed of quartz: there is another lode on the south side, but of no value. The lode in the 70, west of Taylor's, is composed of quartz, and a branch of ore worth 1 ton per fm. In the 60, west of same shaft, the lode is composed of schist and quartz. The ground in the 61 cross-cut, north of River shaft, is of a hard gneiss. The lode in the 50, west of slide lode, is composed of quartz, and the ground about it is hard. In the 38, west of slide lode, the lode is 8 in. wide, yielding small stones of ore. The lode in the 28, west of Perez' shaft, is composed of quartz and spots of copper. In the 18, west of Perez' shaft, the lode is 1 ft. wide, composed of quartz and small stones of ore. The lode in the 8, west of Perez' shaft, driving east on the branch, has become poor; we are now driving west on Basto's lode, where the lode is worth ½ ton per fm. The lode in Rebeera's winze is worth 1 ton per fm. In Dias's winze the lode is worth ¾ ton per fm.—Stopes: The stopes above the 8 are worth 1 ton per fm. The stopes above the 60, east and west of River shaft, are worth 1¼ ton per fathom. The stopes above the 60, west of Joaquim's winze, are worth 1¼ ton per fathom. The stopes above the 70, east of Taylor's shaft, are worth 1¼ ton per fm. The stopes above the 70, west of Taylor's shaft, are worth 1½ ton per fm. The stopes above the 50, east and west of Norte's winze, are worth 2 tons per fm.—Stopes on Caunter Lode: In the stopes above the 60, east and west of Jacintro's winze, the lode is worth 1¼ ton per fm. The stopes above the 50, east and west of Machado's winze, are worth 1 ton per fm. The stopes above the 38, between caunter and slide lodes, are worth ¼ ton per fathom. The stopes above the 40, west of Oak engine-shaft, are worth ½ ton per fathom. The lode in the 28, west of Mill lode, is unproductive. The lode in the 50, east of slide lode, is improving. In the 50 cross-cut, south of Oak shaft, we have cut the great caunter lode, which is 1 ft. wide, composed of quartz and lead, but not enough to value.—Carvalhal Mine: In the adit level, west of incline-shaft, the lode is 4 ft. wide, composed of quartz, and at times small stones of lead; there is another lode coming into the end, on the north side, 1½ ft. wide, composed of quartz.

WEST CANADA.—Captain Plummer, Aug. 22: Copper Bay: The new engine-shaft is going on well, and of late the water has not been so troublesome. The lode in the 10 fathom level, west of new shaft, is smaller, but continues kindly. The stope, west of Palmer's, yields 6 tons per fathom, and that on the east of new shaft is worth 3 tons. The cross-cut, north of Palmer's, has not much changed since last report. The stope on the Fire lode yields 2¼ to 3 tons per fathom; the stopes east and west of Carmichael's winze yields 3¼ to 4 tons per fathom.—Wellington Mine: The level going west of Grenfell's shaft, on the new lode, yields 1½ ton per fathom. The winze below the 20 yields 2 to 3 tons per fathom. The stopes east of Hooper's and west of Rowe's each yields respectively 2½ tons per fathom. Knight's shaft is being sunk with good dispatch, and we think the lode is somewhat improved. Colling's shaft is slow for sinking, but the lode looks promising. The four stopes on the Fire lode are without change, and are worth, on an average, 2 tons per fathom. Our dressing is not going on so fast, owing to the excessive drought; the water has become very scarce, and with all the ingenuity that we can exercise it will affect us considerably for the present month. We have had only a few showers for the summer, and this has been the case generally throughout this country. One of the boilers is completed, and put into its place, and the other will be ready soon. All the surface works are being pushed forward earnestly, but there are a great many things to be done before the close of navigation, which will require all our efforts to accomplish.

CENTRAL AMERICAN.—Alotepeque, Aug. 1: San Pantaleon: The lode in the Guadalupe, or 50 fm. level, driving east of Cornubia engine-shaft, is 6 in. wide, composed of flookan and calc-spar. In San Alfonso, or 40 fm. level, driving west of Cornubia engine-shaft, we have again a branch of flookan, which we think is the lode that was formerly carried off south by a slide. In the San Alfonso, or 40 fm. level cross-cut north, we intersected the lode on July 15. Since then we have driven east of No. 2 cross-course, on the course of the lode, 5¼ varas, where the lode is 4 ft. wide, composed of flookan and calc-spar, with spots of argentiferous blende, but not sufficient to value; we hope to meet with a good lode in a few varas driving, as the lode is so well defined. In the 40, driving west of Taylor's engine-shaft, the ground has much improved in the last few days, by a small branch of flookan coming in from the south, which will be favourable both for excavating and the direction for meeting the deep adit. The lode in the San Felipe, or 30 fm. level, driving east of No. 2 cross-course, is split into branches, and contains spots of ore, but not enough to value. In the San Alfonso deep adit, driving east towards Taylor's engine-shaft, the ground is without alteration to notice; but, according to the present appearance of the ground, both in this level and in the level going west from Taylor's shaft, in about three months hence we shall be near communicating this level with Taylor's shaft; the distance yet to drive is about 28 fms., when we shall throw off the pitwork from Taylor's engine.—Stopes: The lode in the stope No. 5, below San Juan level, and west of No. 5 winze, is worth 2 cwts. of fair quality silver ore per vara. The lode in the stopes No. 10, below San Ricardo level, and east of No. 3 winze, is 1½ ft. wide, worth 2 cwts. of fair quality silver ore per vara. The lode in the stope No. 11, above San Alfonso level, and west of Hosking's winze, has become unproductive, and is suspended. The lode in the stopes No. 12, above San Felipe level, and east of No. 2 winze, is worth 4 cwts. of silver ore per vara. The lode in the No. 1 winze, sinking below San Felipe level, east of No. 2 cross-course, is 2½ ft. wide, composed of flookan, with a little quartz; we have sunk this winze to the depth of 5 varas in the past month, when we were obliged to abandon the sinking in consequence of an increase of water. We are now determining to rise against this winze from the 40 fm. level. We are still working near No. 3 cross-course, in order to find the dip of the strata near the cross-course, which will enable us to follow with safety the heaved portion of the lode. Our returns from this mine in the past month have been 47 tons 3 cwts.—San Antonio Mine: In driving the San Faustino, or 10 fm. level, below the deep adit, east of Ellery's whim-shaft, we have intersected a part of the No. 1 cross-course which hove the lode 11 varas north; here the lode again turned eastward, on which we have driven 4 varas, and the lode at this point is 2 ft. wide, composed of flookan, quartz, mundic, with a little argentiferous blende, worth of the latter 2 cwts. per vara, but of low quality. In the San Ramon cross-cut, driving south-east, in search of the heaved part of the lode, the ground is hard for driving through. The lode in the stopes No. 3, below San Ramon adit level, and west of Manuel's winze, is worth 2 cwts. per vara of low quality silver ore. The lode in the stopes No. 5, below San Ramon adit level, east of Manuel's winze, is 1½ ft. wide, worth 4 cwts. of low quality silver ore per vara; here we shall have to reduce the expenditure, in consequence of the ore being of so low a produce.—San Carlos Mine: In Esperanza deep adit cross-cut, driven south-east, we have intersected Carrera's lode, and found it to be 2 ft. wide, composed of flookan, quartz, and mundic, with a little blende, but not to value. We did not expect to find any riches at this point, as it is near the surface; we shall now commence to open east and west on this lode, to ascertain its value. The lode in San Rafael adit level, driving east, is 1 ft. wide, composed of flookan and quartz, with a small branch of rich silver ore, worth 1 cwt. of the latter per vara. The lode in the stopes below this level is 2 ft. wide, worth 3 cwts. of fair quality silver ore per vara. The stopes in the bottom of this level (San Rafael) have been opened to make a new level, which has advanced 17½ varas, and all timbered and secured. The lode in the stopes above this level is 2 ft. wide, composed o

fissure and quartz, with veins of argentiferous blende running in every direction throughout its matrix; it will yield from 3 to 4 cwts. of fair quality silver ore per vara.—*Duarte's Lode*: The old adit level has been cleared out, and the bottom and sides of the level taken down a further distance of 12 varas, but we have not cleared enough as yet to ascertain the right bearing and underlie of the lode. The total returns from the three mines have been for the past month 84 tons 10 cwts.

Aug. 2.—The superintendent writes that the company's works have been advanced satisfactorily in each department, and although unable on this occasion to report on any important change in the general aspect of affairs, he infers, from the account of the mining operations, that a speedy improvement may be reasonably expected. In the Alfonso level, east of No. 2 cross-course, in San Pantaleon Mine, a fine lode has been intersected, containing stones of ore, which have assayed 190 ozs. for silver, and it is confidently expected that the driving of a few varas will discover a productive lode. Referring to the recently-acquired mine of San Carlos, he says, "I need scarcely draw attention to the interesting feature of the junction of Duarte's with Carrera's lode, at the depth of the Esperanza deep adit, and the influence of it in affecting the future prospects of this mine. The driving of a few fathoms east and west from the point of intersection of the lode will be attended with much interest. The hill on the western side rises very precipitously. The driving of the shallow adit level at San Rafael continues to open up ore ground of moderate produce. The vein here is impregnated with silver ore of rich ley, and generally carries a solid branch against the hanging wall. The returns for the past month were 17 tons 14 cwts. of ore; the stuff was merely griddled and hand picked, and gave an average assay of 72 ozs. per ton. The prospects being so very flattering in this mine, every effort will be made to open ground speedily in the deep adit." The stock of ore at the works and mines is sufficient to supply the eight barrels until the beginning of October. A remittance of 2000*l.* in bills has been received.

VICTOR EMMANUEL.—Thos. Roberts, Sept. 9: Miggiandone: We send herewith bill of lading per *Virginia*, for Swansea, of 96 tons of ore from this mine. We have a large quantity of ore still on hand, to be shipped as soon as another vessel can be found. The new dressing-floors, crusher, &c., are completed, and we have commenced to let the water into the new reservoir, which fills very slowly because the long-continued drought has nearly dried up the stream flowing into it. Having discharged the large force which has been engaged on this work, our monthly cost will hereafter be considerably reduced. We have to report a great improvement in sinking in the bottom of Falconer's level, where the lode is 5 feet wide, worth fully 24*l.* per fathom. The end of the same level is also improved; the lode is now worth for copper 8*l.* per fathom. The end of Thompson's level seems to have reached a new shoot of ore; the lode is 4 ft. wide, and worth at present 10*l.* per fathom, with indications for a greater improvement. All the stopes will average 8*l.* per fathom; average cost of stoping 3*l.* per fathom.—Baveno: We have shipped from this mine 23 tons of very good ore, and enclose bill of lading per *Virginia*. We are happy to inform you that we have cut a lode in the cross-cut west from new shaft. This lode is, however, not the main lode, and we are, therefore, continuing the driving of the cross-cut. The lode cut is visible in the torrent, to the east of main lode, and the cross-cut has intersected it 18 fathoms under the torrent, where it presents a most favourable appearance, being composed of copper ore and spar; it is about 3 feet wide. We have commenced working on it, expecting to meet a fine course of copper ore in driving south. In the Cava Vecchia we have the following improvements:—The side lode, in the 35 metre level, is now worth 8*l.* per fathom. We have cross-cut west, in the 50 metre level, and intersected the side lode, where it is 3 feet wide, worth for copper ore 10*l.* per fathom. The stopes in the bottom level, south of shaft, are worth 16*l.* per fathom.—Crodo Gold Mine: It will give you much pleasure to hear that we have accomplished the principal object which we had in view when we commenced operations in this mine last January, which was the clearing of the ancient shaft to its bottom, for the purpose of examining the lode at that important point, to verify its nature and to see whether the richness in gold which tradition ascribed to it was based upon fact, and we have now the great satisfaction to inform you that the bottom of the mine has been reached, that the surface water which drove the old men out of it is no longer an obstacle in continuing regular mining operations in depth (the greater part of it being drained regularly through the adit), and that the lode in the very bottom of the mine is more regular and richer than we expected. It is composed of quartz, crystallised auriferous pyrites and carbonate of lime, and makes a fine van of gold. The lode, as far as seen at present, is about 1½ foot wide, and can be worked very cheaply and speedily, being of a soft nature. The ore broken from the very bottom of the shaft gives to assay very nearly 3 ozs. of fine gold per ton, while the ore from the stopes in the bottom, where the old men left off working, gives the extraordinary yield of 10 ozs. 5 dwts. of gold per ton of ore, the lode being at this point also most regular. The specimens on which these assays were made were fairly broken from the lode. We forward to the office a box containing ore from these points, for assay in London. The total depth of the shaft has proved to be only 30 metres under the adit, or about 15 fathoms, so that the mine is still a very shallow one, and there is no doubt but what it will produce as great riches hereafter as the old men had formerly. That the ore must have been very rich when the mine was worked in the beginning of the last century is now evident. The old men have stoped away every inch of lode for a length of nearly 80 fathoms, and for the whole depth from surface to the bottom of the mine. We can, therefore, sincerely congratulate the company on the now ascertained value of this property, which requires only the erection of an amalgamating establishment to make immediate returns of gold. To prove this we send herewith 106 grammes of gold, obtained from six small native mills, which we have put up, and which were produced from about 3 tons of ore, taken from the new discovery in the adit. Although the lode and ore from this discovery is nothing like as rich as the ore now in sight in the bottom of the mine, and although the native mills lose half of the gold contained in the ore, the yield of over 1 oz. of gold per ton is most satisfactory. We invite your attention to the fineness of the gold. We shall now put the old workings in thorough repair, and commence to sink on the lode. There should be no time lost in beginning the construction of an amalgamating establishment, as we have no doubt of being able to supply it with rich ore long before it can be completed.

NOVA SCOTIA LAND AND GOLD.—The directors have received by the present mail a remittance of 156 ozs. 7 dwts. of gold, the produce of Sherbrooke and Oldham. A great scarcity of water for crushing is still felt at Oldham. From Oldham the agent writes:—"I am much encouraged about getting another rich deposit on the Hall lode. We have found it again on the surface as we were prospecting westwardly, and about 15 ft. further to the north it is looking very well, and appears to increase in quality at it approaches the slate." The agent at Sherbrooke states that "The Sears lode looks a great deal better in the bottom than it ever has before; its present size in the bottom will average about 8 in. wide, and looks very well, being well sprinkled with gold. Nearly all the gold we took out of the shaft this month was from the last 3 or 4 cwts. of quartz taken off in the bottom of shaft. I believe this is going to be one of the best lodes in the mines. It will average, if it keeps its quality, from 2 to 3 ozs. per ton, which will pay handsomely for working. Our company's property on this lode is considered the best in Sherbrooke, and I have every reason to believe that this is going to be one of the best paying lodes in Sherbrooke."

VAL TOPPA.—W. Harris, T. Roberts, Sept. 8: Since our last report we have had only a few hours rain, and the drought having continued for nearly three months, we are not able to work more than 59 of the old mills at the mine for want of water; we hope for rain shortly, when we shall be able to work 200 mills steadily, because the accumulation of ore, broken and brought to the mills, is very great. The amalgam obtained by working of the above-mentioned small number of mills, during the last days of July and during Aug., has been smelted, and has resulted in 1972 grammes, equal to 63 ozs. of gold, the ore maintaining its ordinary good produce. The new carriage-road from the Val Toppa to the establishment will be completed during this month. At the point chosen for construction of establishment, we have a considerable force engaged in erecting a wall against the Auza, and in constructing the outlet for water from wheel-pit. As soon as the official visit of the Government engineer has taken place, which is expected shortly, the excavation of the new water-course will be commenced. The railroad from the mine to the Sled road will be finished during September. At the mine we have an improvement in the end of Marmo Rosso level, where the lode is 5 ft wide, very regular, and rich throughout in gold. All other stopes as productive as ever.

VALLANZASCA.—Jas. Roberts, Thos. Roberts, Sept. 5: The large water-wheel is now in its place, the crusher has been put together, and the tramway from it to the end of slide road is under construction. The main shafting has been placed through the new amalgamating-house, and we are now waiting for the arrival of the machinery ordered in England to proceed with the putting up of the forty mills. We have great pleasure in reporting that two of the new mills are in operation; they have been placed outside the amalgamating-house, and although they are not as perfect in construction, and the motion as regular as the mills inside will be, still the result obtained during the last few days from the working of these two new mills is such that all question as to their great success is settled. We find that each machine will grind to an impalpable powder about 1 ton in 24 hours, giving 40 tons of ore for the 40 mills every 24 hours, and, judging from the returns obtained during the last week, the produce will be from 12 to 14 dwts. of gold per ton of ore, of which ore the supply is very great, and we look forward that this yield will be increased when the more perfect mills are in full work. The 40 new mills will do in 24 hours the work of 1200 old native mills (such as are in use at present, and which require the services of 200 men), while for our new establishment only 18 to 20 men will be engaged. The amalgam produced by the old mills, and a few days' working of the two new ones, has been smelted, and yielded 103 ozs. of gold, obtained from 206 tons of ore. The gold is of a better quality than usual.—Mines: Our whole system of tramways and shoots, from the Cava Vecchia to the Fornaletti, will be entirely completed this month, and we shall commence to bring down ore through them during October. This has been a very costly but most necessary undertaking, upon completion the cost of transit of the ore from the mine to the establishment will be reduced to 2*s.* 5*s.* per ton. We have made another rich discovery in virgin ground in the Cava Vecchia level, and we consider it the most important discovery made since we commenced operations in the mines, as it insures us a great supply of rich ore, yielding by assay over 2 ozs. of gold to the ton. The lode is about 6 feet wide, and as we intend to keep the two new mills supplied with this ore, we shall be enabled to increase immediately our returns of gold.

THE GUANO PANIC, AND THE MINERAL MANURE INTERESTS.—The latest news from Peru, as to the obvious determination of Spain to retain the Chincha Islands, as shown by the expulsion of the labourers employed in loading, &c., has naturally invested the future of the guano supply with great incertitude. It is a coincidence at once singular and significant that at this moment the well-known, but not hitherto very well worked, deposits of phosphate of lime in Estremadura, Spain, should be introduced to the British public through the medium of a joint-stock company, of which Prof. Way, the late consulting chemist of the Royal Agricultural Society, is vice-president, one of his colleagues on the board being a director of the Bank of Madrid, from which it may be assumed that the long-promised settlement of the Spanish debt is indeed at last at hand. It is not the least strange of the anomalous incidents in the history of Spain that she should thus simultaneously close the door upon the source of one element of extreme value to husbandry, and open it to another, the Estremadura phosphate being admittedly the best basis of all the mineral manures; while these deposits, in addition to their virtually inexhaustible quantity, have been rendered easily available for transport to Lisbon by the railway via Badajoz. The Earl of Malmesbury, and some equally eminent "farmers' friends," are among the reputed sterling supporters of this enterprise.

BANKING AND MINING.—In the presence of the new and powerful impulse to banking business, the great results of which are now attracting the public attention, we have a suggestion to make, which we sincerely trust the originators of these new enterprises will gravely consider. Mining is the great material interest of California. That interest is now suffering from lack of capital necessary for the development of our mines. Mines have a positive value, just as much as have lands or houses, bonds, mortgages, railroad stock, or any other "securities." There are good mines and bad mines, just as there are good and bad properties of all species. A man or a company that has a really valuable mine ought to be able to raise money upon it, just as he could upon estate or stock. We would have our new banks come up to the requirements of the age in this respect. For this purpose, they should have connected with them, as a regular paid officer, a professional metallurgist, acquainted with mines, and capable of judging of them and their value. In addition to the requisite scientific qualifications, he should be a man of high character and unquestionable integrity, altogether beyond the suspicion of being "influenced" or "approached." Upon the recommendation of this officer, the bank should be as ready to make loans on mining property as on any other.—*San Francisco News Letter and Pacific Mining Journal.*

Mining Correspondence.

BRITISH MINES.

ALLT-Y-CRIB.—*J. Hughes, Sept. 12:* Deep Adit: The four men are still driving, and we have cut the caunter, but the lode we drove upon carried us a little more south than we anticipated; therefore we have about 10 fathoms to drive along the caunter to come to ore ground and under new shaft. You will see by the sketch where the deep adit stands of reaching under the ore ground or old workings on surface. The tributers are getting on as usual. I believe this to be the trial the company was formed for to carry out, and we shall shortly have it proved.

BAGTOR.—*Sept. 15:* The winze sinking in the bottom of the 16 fm. level, west of Prosper engine-shaft, is already down 4 fms., and I am pleased to find the lode is continuing very good, fully maintaining its value of 12*l.* per fathom. The lode in Quick-beam engine-shaft is about 3 ft. wide, carrying tin throughout, and gradually becoming richer as it gains depth. All other operations are progressing satisfactorily, without change to notice.

BEDFORD CONSOLS.—*Capt. Mitchell, Sept. 15:* In the middle adit level we have during the past week intersected a small slide, underlying east, and which is now about 2 ft. above the bottom of the level, but we do not find it as yet to pass through the north wall of the lode, which is at present small.

BEDOL-AUR.—*T. Pierce, Sept. 15:* The 70 yard level has improved since my last, and looking promising for a further improvement; we expect this level to intersect the Belil Gwyn vein in the course of a few days, and a good bunch of lead may be anticipated at the junction of the lodes. The branches increase in width as they descend, and are producing a good quantity of lead.

BILLINS.—*F. Evans, Sept. 15:* The lode in the engine-shaft is very poor and hard, and as the main producing lode is standing about 2 fms. to the south, we intend leaving the present lode, and incline the shaft towards the main lode in sinking; at present the men are engaged shooting down the south side for that purpose; it will be much cheaper to sink on the south lode. In the 70 west the lode is very small, but there is a little lead coming in. In the rise behind this end the lode is worth 1 ton per fm.; price for rising 6*l.* per fm.; the price for the level is 4*l.* 5*s.* per fm. In the 70 east the lode is 2½ ft. wide, opening tribute ground; driving at 4*l.* 15*s.* per fm. The 15 tons of lead ore sold last week brought 14*l.* 6*s.* 6*d.* per ton, and we are busy dressing for another sampling.

BOSCAWEN.—*J. Edwards, R. Giles, Sept. 10:* There is nothing new in the 80, west of Hunter's shaft, or in the 70, west of ditto, since last reported. The lode in the sump-winze, sinking below the 70, is worth 30*l.* per fm. for copper ore. The 70 east, on the south lode, is looking very kindly, producing good stones of copper ore. The stope in the back of this level, west of Hunter's, is worth 25*l.* per fm. The lode in the rise in back of the 60, west of said shaft, is worth 6*l.* per fm. for copper ore. Nothing new in the 30, east of caunter shaft. We have intersected the tin lode in the 14 cross-cut, which is 15 fm. wide, producing good work for tin.

BOTTLE HILL.—*J. Eddy, Sept. 13:* In sinking on the course of the main lode, in the western part of the mine below the shallow adit level, where the main and bucking-house lodes form a junction, the lode is still large, from 8 to 10 ft. wide, and very much improved in quality this last week. There is a long piece of ground in this part of the mine that has not been fairly tried, and, judging from the lode now seen in our present bottom, I am of opinion about this point we shall meet with a good lode. The stopes, west of William's shaft, in the back of the 12, are turning out moderate stamps work. The other parts of the mine are without alteration. I am sorry to say we are still short of water for drawing and stamping.

BRONFLOYD UNITED.—*T. Kemp, Sept. 14:* The lode in the 52, west of engine-shaft, has greatly improved during the past week. We have now cut into the run of ore ground about 6 ft., and for that distance the lode is worth quite 25 cwts. of lead per fm. The forebreast is looking well, and I never saw a more promising lode. We are progressing well towards another sampling.

BULLER AND BASSET UNITED.—*John Rule, Sept. 14:* In the 80, on the south lode, the lode is 3 ft. wide, composed of mundic, peach, quartz, and some good stones of ore. In the cross-cut north, in the 80, in the last 3 ft. we have had elvan in driving. The 60 fm. level, on engine lode west, is much the same as last reported; it is yielding enough tin to pay for driving the end.

CAMBRIAN (Gold).—*T. Martin, W. H. Pascoe, Sept. 13:* No. 2 Cross-cut: We are driving south towards No. 2 B.; the lode about 3½ feet wide, of a very encouraging character, mineralised with copper, lead, and blende, with gold disseminated throughout.—No. 2 A Shaft: The ground here is very hard; only 1 fm. 3 ft. has been sunk by six men during the month. We are anxious to make communication with No. 2 end, for the twofold purpose of draining the eastern end, as well as to prove the beautiful lode now going down in No. 2 B shaft.—No. 2 B Shaft: The lode is large, composed of a beautiful quartz and strings of schist. We have tried samples of the different layers, and found one to contain 6 dwts.; one 7 dwts.; one 8 dwts.; and one from the south branch 18 dwts. of gold to the ton of ore. This lode looks more encouraging than any we have seen in this mine, and promises eventually to realise what was said about it in the end of 1863. We are now timbering and collaring the shaft and shall shortly commence sinking again on tutwork; a general sample of the ore taken from this shaft produced 10 dwts. of gold to the ton.—No. 6 Engine-shaft: The cross-cut south, intended to intersect the lode under the elvan, is in about 8 feet.—Wellington: Here the lode continues its character, but no improvement for gold; we have men trying the outcrops of the several lodes in the sett; some of them look promising, showing specks of gold of a tolerable size, but as yet nothing of value.—North Vigra: No alteration here.

CAPE CORNWALL.—*R. P. Goldsworthy, Sept. 14:* Saturday last was our pay and setting-day, which went off well. We set the adit to drive south on Wheal Owl lode at 55*s.* per fm.; the ground we are opening on this lode will pay to take away. The adit to drive south on the south lode at 35*s.* per fm.; the lode is a very promising one. We have forked the water 18 fms. below the skip-roads. We are clearing away the ground necessary to be removed for the stamps with all possible speed. The second boiler was brought here on Saturday, which the engineers will fix this week.

CARGOLL.—*J. Grose, Sept. 14:* The lode in Michell's engine-shaft is 5 ft. wide, very soft, and rich in copper, lead, and jack. In the 110, south from Michell's, both lodes are producing saving work, and are now 8 ft. apart. The stopes north of Michell's, at the 110, maintain their value. The 100 end, north from point of horse, is yielding ¾ ton of lead ore per fathom. The 30 and 10 fm. level ends, north from Purser's, are both improved. From Sergeant's shaft, at the adit level, a cross-cut has been driven west 4 fathoms, which has intersected a branch or part of the west lode, which is of a kindly character, and producing saving work.

CEFN BRWYNO.—*Sept. 13:* The lode in the 92, east of Taylor's shaft, is 2 ft. wide, with good spots of lead ore. The lode in the 92 west is 3 feet wide, producing a little ore; here we may expect the lode to improve shortly, from the ore ground seen in the level above. The lode in the 80, west of Taylor's shaft, is 4 ft. wide, producing 8 cwts. of ore per fm. The lode in the 80, east of Taylor's shaft, is 5 feet wide, yielding 1 ton of ore per fm. The lode in the 56, or deep adit level, is 3½ feet wide, looking very promising, containing strings of lead ore. The lode in the winze sinking under the 68 is 5 feet wide, producing from 1 to 1¼ ton of lead ore per fm.

CLARA UNITED.—*Jas. Lester, Sept. 15:* Llywernog: The engine-shaft is making good progress towards the 50; now down 47 fms.—Dolwen: The lode in the shallow level west, towards the shaft, has considerably increased in size, and is looking very promising for carrying lead ore; it is now wider than the level. The air is bad in the end, so I have put two men to rise and sink a winze through about 30 fathoms from the mouth of the level, which can be done for a small outlay, and I hope will give sufficient ventilation to carry the work on to the shaft.

CLOWANCE WOOD.—*E. Chegwin, Sept. 14:* The sumpmen have completed putting down rods, and are now engaged putting down plunger-lift from surface to adit. The masons have completed putting in boiler, now building boiler house; also getting on well putting in engine, which will be ready to work by the end of this month.

CONNORREE.—*Capt. Bishop, Sept. 10:* The deep adit is still of the same promising character, and yielding good lumps of sulphur. Nothing new has taken place in the 74, east of engine-shaft, for the week; yielding good lumps of sulphur and coppery smalls. The 54, west of engine-shaft, is yielding good copper ore. The 45, west of engine-shaft, is looking well for a good yield of copper and sulphur smalls. The 20, west of new shaft, is still poor for copper ore. The 18 fathom level ends, east and west of Field's shaft, are yielding good ore. The 10, east of Kempson's shaft, is producing good copper ore, but not in large quantities. The copper and sulphur branch intersected in the 10 cross-cut, south of Tracey's shaft, are looking well. The stopes on the great copper and other lodes, on the whole, never yielded so much copper and sulphur ore as at present.

CRANE.—*Henry Skewis, Sept. 14:* There are strong branches of spar, mundic, and copper ore at the engine-shaft sinking below the 80, which is the best indication we have ever had at this shaft for an improvement in the 90 when the lode is cut. The lode in the 80 west is 1 ft. wide, composed of spar, jack, and sprigged with copper ore. The lode in the 70 west is at present small and unproductive. The lode in the 60 west is 1 ft. wide, composed of spar, jack, mundic, and good stones of copper ore, but not enough to value. The lode in the rise in back of the 30 west is at present small and unproductive. The lode in the winze sinking below the 20 is 1 ft. wide, producing good stones of copper ore. We hope this winze will be holed in about a fortnight, when we expect to lay open some tribute ground. The tribute pitches on this lode are much the same as last reported.—Brigan Lode: The lode at the shaft is 2½ ft. wide, composed of spar, prian, mundic, jack, and good stones of copper ore, with a very promising appearance, but I am sorry we have not been able to do much at this shaft for the last fortnight, for want of air. We are driving the cross-cut north in the 50, from Crane lode, to see if there is any more lode still further north. We shall sample about 25 tons of copper ore on Tuesday next.

CRENVER AND WHEAL ABRAHAM.—*J. Vivian, Sept. 15:* At Vivian's engine, in Oatfield, the engineers continue to get the parts of the 90-inch cylinder-engine in its position as fast as possible. The masons are still employed building the stack (which is now about 50 feet high), and also the whim and capstan-house for No. 1 30-in. winding-engine. The boiler-building staff has been increased this week by 12 men more. Our large saw-mill is regularly at work, and answers admirably; the same engine drives the fan-blast for the smithy. The engineers' fitting-shop, with turning, boring, and screwing machinery, is being fixed with all possible dispatch. At Wheal Abraham middle sump the engineers are getting on rapidly with fixing the 80-in. cylinder-engine; the masons here are building stack, balance-bob, stand, &c. At Thomas's, or western district, the masons are employed building whim and capstan for No. 3 30-in. winding-engine; portions of the above steam winding-engines, capstan, &c., with the large pit-work, continue to arrive on the mine daily from the different manufactories, so that we have already a very valuable plant of machinery on the mines. The large reservoir is in a forward state, and will be of great benefit to us in a very short time.

CROWAN CONSOLS.—*J. Seymour, Sept. 13:* I have just come up from the 30 fm. level; the lode in the western end is of much more value than it has been since we cut the copper, being over 15 in. wide in the bottom part of the end, and for more than half-way the height of the level, 7 feet above this, not so much ore, but very good. I believe I am safe in saying it will produce 2 tons of good ore for 6 feet in length and 6 feet high; it has the appearance of a settled course of copper; if it continues, which I have every reason to expect it will, we shall soon cut out a good pitch in the back of this level. The bottom of the end, for 2 feet up, is worth full 3 tons per fm., being 1 ft. 6 in. wide, nearly solid copper, which speaks well for the 40; there is ample proof that the 40 will be a very rich level. There was an error in my last as to the run of copper ore standing a mile in length westward; it should have been half-a-mile.

CROWLWM.—*J. Roach, Sept. 14:* The floor of quartz we are still driving on is 4 ft. wide, and occasionally presenting strong spots of lead ore. From the spar accompanying the large blocks of lead ore found, I think the present drivage will lead us to the lode.

CUDDRA.—*F. Puckey, E. Dunstan, Sept. 15:* In the 105, west of Walker's shaft, the lode is still very large, and of a very promising character, composed of quartz and peach, producing tin throughout, worth 25*l.* per fm.; in the same level, east of cross-cut, the south part of the lode for 6 ft. wide is worth 18*l.* per fm. In the stopes in the back of this level the lode is still 9 ft. wide, and worth 18*l.* per fm. In the 90 cross-cut south, west of Walker's shaft, we have intersected the south lode, or a branch, which is 2 feet wide, containing a little tin, but as there are still indications of there being more lode further south, we shall continue driving the cross-cut a little further to prove the same. The lode in the stopes in back of the 75 west is 6 ft. wide, and worth 16*l.* per fm. In cutting out the lode behind the 75 end west the lode is 3 ft. wide, composed of quartz, peach, and iron, and producing good stones of tin. In the stopes in back of the 60 west no lode has been taken down since our last week's report.

CWM ERFIN.—*Sept. 13:* The lode in the rise in back of the 20 fm. levels, 90 fms. east of boundary, is 2 feet wide, yielding stones of ore occasionally. The lode in the four stopes in back of the 20 is 3 feet wide, and will average 10 cwts. of ore per fm. The lode in the 10 east is 5 feet wide, and worth 1¼ ton of ore per fathom. The lode in the stopes in back of the 10 is worth 14 cwts. of ore per fathom. The lode in the deep adit east is 4 feet wide, and worth 1¼ ton of ore per fathom. The lode in the 10 west is 2 feet wide, containing spots of lead ore. The lode in the shallow adit is 1 ft. wide—unproductive. The lode in the shallow adit is 3 ft. wide, and worth 2 tons of ore per fathom.

DALE.—*R. Niness, Sept. 15:* The Pipe vein, I regret to say, is not yielding much better than when I last wrote you, but there is every symptom of an improvement.

DARREN.—*R. Williams, Sept. 13:* We have not yet reached the north wall of the lode in the 15, and although the upper part of the end is not so good as we have seen it towards the bottom, it is as good as at any former period; the ground at present is very hard, being mostly of hard spar, with good stones of ore. We are very anxious to see the north wall before we turn on its course, and in order to open ground for stopes the sooner, we have placed some men to drive on the lode west from the shaft; at this point we have a little ore, but from the appearance of the lode on the east side of the cross-cut we hope to meet a good lode soon, and facilitate the stoping operation to secure good returns from the discoveries made at this level. The stope in back of the 10 is without material alteration since my last. We are busily engaged in dressing, and matters generally are in progress. The lode in the 15 is worth as far as seen 2 tons of ore per fm.

DEVON AND CORNWALL UNITED.—*T. Neill, Sept. 13:* The lode in the 12 fm. level east has improved, worth 3 tons of ore per fm. The stope above is worth 5 tons per fathom. The lode in the deep adit east is producing some good stones of ore. At William and Mary the lode in the 22 east is looking better, worth 3 tons of ore per fm. The stope above is worth 5 tons per fathom. The lode in the 10 east is worth 4 tons of ore per fathom.

DEVON COPPER.—*Thos. Neill, Sept. 14:* The lode in the shaft is producing gossan, capel, mundic, and copper ore. In the adit level we have cut into the lode 7 ft., which looks well, and is worth as far as seen 3 tons of ore per fm.

DOLFRWYNOG.—*C. W. Seccombe, Sept. 12:* No. 2 shaft, the only point of operation at present, is progressing satisfactorily; we have a lode of quartz now in the bottom, about 4 in. wide, and there are several smaller veins dropping into it from the hanging wall, which I think will cause considerable improvement in the course of sinking another fathom or two.

EAST BOTTLE HILL.—*R. Williams:* I find a shaft has been sunk 9 fms., and a cross-cut driven to the lode, which is of a large size, and of a very fine description, and, where opened on, for about 3 fms. in length, it is worth for tin between 40*l.* and 50*l.* a fathom, with every prospect of a continuance. From my experience of the district and neighbourhood of the mine, extending over a period of 25 years, I can safely say that so far as opened there has been nothing like for richness and importance discovered for many years at so shallow a part, and the strength and richness of the tin are sufficient, in my opinion, to show that it is the outcrop of a magnificent deposit of ore. The conditions being in killas within 100 fms. of the granite, and the mine can be developed rapidly, and at a cheap rate, while water-power is available at a trifling expense. An adit level is driven towards this lode to within 30 fms., and this will give at least 30 fms. of back, while it can be driven home at 40*s.* per fm., and the ground requiring no timber; this is an important feature, while there are others of equal importance and advantage, amongst which I may mention the fact of another adit being driven towards the same lode to within about 40 fms., and at an increased depth of several fathoms. These are advantages scarcely to be met with—70 fms. in depth on the lode without water charge or pumping-machinery, and all this at command for an expenditure of about 500*l.* I understand that a call of 300*l.* has just been made, and I do not hesitate to say that if the course of tin discovered continues, and there is no evidence to the contrary, no further call will be required. There are other lodes in the grant of good appearance, one of tin and the other of copper; the former has only been opened a few feet below the surface, and produces good tin, the latter has been intersected by the shallow adit, and produces copper of a very superior description, while the deep adit alluded to is close home to it, and with the increased depth of 40 fms. there is a fair change of opening a good copper mine in addition to the tin actually discovered. In my opinion you may with confidence recommend the property to any of your friends desiring investment.

EAST CARADON.—*J. Seccombe, Sept. 14:* Caunter Lode: The 60 east is producing saving work; the 70 east is worth 6*l.* per fm.; the 80 east, saving work; the 80 west is worth 20*l.* per fm.—New Lode: The 80 west is worth 9*l.* per fm.—South Lode: The 70 west is worth 18*l.* per fm.; and the 70 east is unproductive.

EAST CARN BREA.—*T. Glanville, J. Scholar, Sept. 14:* No. 3 Lode: In the 60 west the lode is producing 2 tons of copper ore per fm. In the stopes in back of the 60 the lode is producing 1 ton of ore per fm. In the winze sinking below the 50 the lode is producing 1 ton of ore per fm. In the winze sinking below the 40 the lode is producing 2 tons of ore per fathom.—New Lode: In the 50, driving west, the lode is producing 1 ton of ore per fathom. In the 30, driving east, the lode is producing 2 tons of ore per fm. In the 26 west the lode is producing 2 tons of ore per fm.—No. 4 Lode: In the 50 west the lode is producing 3 tons of ore per fm.

— *Sept. 10:* Tutwork Setting: The old engine-shaft to sink below the 70, by nine men, at 20*l.* per fm. The 70 cross-cut to drive south of old engine-shaft, by six men, at 7*l.* per fm. The 60 to drive east of the cross-course, by six men, at 6*l.* per fm. The 60 to drive west of the cross-course, by four men, at 5*l.* per fm. The stopes in back of the 60, by two men, at 2*l.* per fm. The 50 to drive east of Thomas's shaft, by four men, at 5*l.* per fm. The 50 to drive west on No. 4 lode, by four men, at 5*l.* per fm. The 50 to drive west on No. 6 lode, by two men, at 2*l.* 10*s.* per fm. The 50 cross-cut to drive south of the new lode, by four men, at 5*l.* per fm. The 50 to drive west on the new lode, by four men, at 3*l.* per fm. The stopes in back of the 50, by six men, at 1*l.* 5*s.* per fm. The winze to sink below the 40, by four men, at 8*l.* per fm. Thomas's shaft to sink below the 50, by nine men, at 25*l.* per fm. The 30 to drive east from the western shaft, by four men, at 4*l.* 10*s.* per fm. The winze to sink below the 30, by four men, at 8*l.* per fathom. The 26 to drive east on the new lode, by four men, at 3*l.* per fm. The 26 to drive west on the new lode, by four men, at 4*l.* per fm. The rise in back of the 26, on the new lode, by two men, at 4*l.* per fm. The 26 to drive east of Thomas's shaft, by two men, at 7*l.* per fm. Buckley's shaft to sink by six men, at 10*l.* per fm. The 60 cross-cut to drive south, by two men, at 3*l.* per fm. The winze to sink below the 50, by four men, at 5*l.* per fathom.

EAST DEVON CONSOLS.—*T. Neill, Sept. 14:* In the 70 north the end is producing more spar, with spots of copper ore and mundic, but have not cut the lode yet.

EAST GRENVILLE—(*Special Report*).—*A. James, Sept. 10:* The engine-shaft is sunk and completed to the 75; the lode is small and poor. The 75 is driven 10 fathoms west of shaft; lode about 1 ft. wide, of no commercial value for either tin or copper ore; the rock is hard for driving. There are about 10 fms. more to drive this end under where the ore was first met with in the 65; and, judging from appearances, if the ore dips at all it is likely to be a western one, and although a good lode of ore may be met with in extending this level west, yet you must bear in mind it is by no means certain, as the lode in bottom of the 65 was not near so good for the last 10 fms. driven as it was in the back. The 72 is driven about 2 fms. east of shaft; lode hard and poor. The 65 is driven about 40 fathoms east of shaft; lode hard and poor; in this drivage a little tin has been met with in places that will be taken away at a high tribute, but will not leave any profit to the adventurers; this level is extended west of shaft about 44 fms.; the first 20 fms. the lode is of no commercial value; the next 20 fms. the lode will average about 25*l.* per fathom; the last 4 fms. the lode is split into two parts; the south part is now being driven on; lode about 2 ft. wide, worth for tin and copper 15*l.* per fm.; the north part is of no value. The rise in the back of this level clearly proves the ore to last up about 3½ fms.; this, at an average of 5 tons per fm., gives 350 tons, at an average price of 5*l.* per ton, will amount to 1750*l.*, the value of the ore ground discovered in the back of the 65. Should the ore last down as far as it did up there will be about 3500*l.* worth of copper ore discovered in this drivage. The 55 is driven west of shaft about 30 fms.; lode 1 ft. wide, worth 10*l.* per fm. There is nothing else of importance to report upon. The 75 west is the great, and I may say almost the only, point of interest in the mine, should a good lode be met with.

EAST JANE.—*T. Hodge, Sept. 15:* The shaftmen are now engaged cutting ground for bearers and cistern, preparatory to fixing plunger-lift in the 26. The part of the lode carried in the 26 north end is 2 ft. wide, producing some nice stones of lead, and looks promising to improve. We have suspended the stopes in the back of the 26 south. We cannot manage to draw the stuff until the engine is got to work. The stope in the back of the 14 north will produce 4 cwts. of lead per fathom. The engine-house walls are up; all the heavy work of the engine is on the top of the hill; the engineers are fixing a gangway, preparing to get up the bob in its place. We will endeavour to push everything as fast as possible, in order to get the engine to work in the quickest possible time, when we shall be in a position to open out ground fast, and make regular returns of lead.

EAST LAXEY.—*J. Horsley, R. Rowe, Sept. 13:* The vein in the shallow adit continues very strong and kindly, with gossan and quartz, and a little lead and jack bespangled through the same; the vein is above 4 feet wide, and improves in width and character as we go under cover. The deep adit continues about the same; the vein is very strong and kindly, with a good masterly appearance; it is 4 ft. wide, and looks to be very promising in depth.

EAST PROVIDENCE.—*T. Uren, W. White, Sept. 14:* We are making fair progress with the sinking of Wilson's shaft below the 60; it is down 3 fms. below the level, and is being sunk by 12 men, at 10*l.* per fm. The 70 is driving south of Boorman's shaft, on the flookan, by six men, at 60*s.* per fm.; at this point we have about 5 fms. more to get under Wilson's shaft. The 60 is driving east of junction, on Bamfield's lode, by six men, at 8*l.* per fm.; lode worth 30*l.* per fm. A winze sinking below the 60, east of junction, on Bamfield's lode, by nine men, at 12*l.* per fm.; lode worth 20*l.* per fm. The 60 is driving south of Wilson's, on the flookan, by four men, at 55*s.* per fm. The 50 fm. level cross-cut is driving south of Boorman's, by six men, at 12*l.* per fm.; here in about 5 fms. more we expect to cut Bamfield's lode.

EAST ROSEWARNE.—*J. James, Sept. 15:* At Hallett's shaft the ground is hard and the lode small. In the 75 east the lode is 18 inches wide, worth 6*l.* per fm. In the 75 west the lode is 2 feet wide, worth 15*l.* per fm. In the winze sinking below the 65 the lode has made a splice, and is poor at present, I think it will open again shortly. We shall be ready to commence sinking King's shaft below the 65 on Monday next. There is no change to notice in the 65, west of King's; but as we sunk through a good course of ore at the shaft dipping in this direction, we expect to meet with it shortly. In the 55 west the lode is 9 inches wide, worth 8*l.* per fathom. The stopes are much the same as reported last week.

EAST TRESKERBY.—*J. Nancarrow, Sept. 13:* The 12 east is worth 6*l.* per fathom. The stope in the back of the 12 east is worth 8*l.* per fathom. The stope in the back of the 12 is worth 4*l.* per fathom. The stope in the bottom of the 12 is worth 12*l.* per fathom. The stope in the back of the 20 is worth 4*l.* per fathom. The lode in the 30 east is small. We are pushing on the 30 fm. level cross-cut as fast as possible. The winze below the adit, west of the engine-shaft, looks better, yields ore to save, and looks as if we should have a valuable lode shortly.

EAST WHEAL ELLEN.—*Capts. Pryor, Garland, and Corfield, Sept. 9:* Setting Report: The deep adit cross-cut to drive south of Pryor's shaft, by six men, at 9*l.* per fm.; this end is in the elvan course, and will continue in it for about 4 fathoms further; it is thickly impregnated with copper ore, and has drained the water from Barywannas lode, at the shallow adit level. To stope the bottom of the deep adit level, west of the shaft, by four men and one boy, at 3*l.* per fm., on a lode 6 ft. wide, and worth about 1 ton of ore per fm. We have about 2 fms. in length more to stope to come under the ore discovered in the side of the level. A new winze to sink below the shallow adit level, on Baigwannas lode, by two men and two boys, at 3*l.* 10*s.* per fm.; the lode is 2 feet wide, orey throughout, and very promising. The stopes in the back of the deep adit level are set on tribute at 10*s.* in 1*l.*

EAST WHEAL FLORENCE.—*Wm. Verran, Sept. 15:* The engine-shaft is down between 7 and 8 fathoms from surface on the course of the lode; present price for sinking 10*l.* 10*s.* per fathom; the shaft to be carried 13 feet by 6 feet within timbers; the lode continues large, in fact wider than the shaft, and is producing quantities of mundic, and occasionally stones of cop

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Sept. 14: The lode in the shaft sinking below the 75 is 2 feet wide, and producing good stones of yellow ore—a kindly lode. The lode in the 75 west is 2 feet wide, and producing good stones of black ore and quartz, a very kindly lode, and the ground is getting easier. The lode in the 65 west is 2 to 2¼ ft. wide, and producing good ore and tin, 1¼ ton to the fathom, or worth in money (say) 15*l.* per fathom. The western stope is yielding 7 tons of ore, and the eastern stope 6 tons, with good work for tin, probably for the latter nearly 10*l.* per fathom. The lode in the 55 west will average 2½ ft. wide, producing good grey ore and splendid work for tin, worth at least 20*l* per fathom. Altogether we consider this mine to be opening out very satisfactorily.

EAST WHEAL RUSSELL.—J. Goldsworthy, Sept. 14: Homersham's shaft is in regular course of sinking below the 130. The cross-cut in the 130 east, driving north, is extended 3 fms. 4 ft. towards the lode; if the ground had proved as favourable as it was when the cross-cut was commenced, the lode would have been reached ere this. By the distance driven in the 130 there is 8 ft. to drive to cut the lode in the 130, provided the underlie is the same as in the upper levels—the ground continues hard, and the progress is slow. The ground in the rise in back of the 130 fm. level is favourable for progress. In the 120, west of Maynard's cross-cut, the part of the lode that has been carried is 4½ ft. wide, composed of capel, iron, quartz, mundic, and producing a little saving work for copper ore. The lode in the 77, west of Northey's cross-cut, is 3½ ft. wide, producing rich stones of grey and yellow copper ore. In the 45 east the lode is 3 ft. wide, composed of capel, quartz, peach, mundic, and stones of yellow copper ore. The ground in the 88 cross-cut, driving north-west of Hitchins's engine-shaft, has improved a little—better progress has been made this week.

EAST WHEAL TOLGUS.—Sept. 14: Redruth Consols Lode: In the 34, east from John's shaft, the lode is 20 in. wide, composed of spar, mundic, and peach. The ground in the 34 cross-cut is hard. The lode at the adit, east of the cross-cut, is 2 ft. wide, consisting of gossan, spar, mundic, and killas. In the adit level, west of the cross-cut, the lode is 2 ft. wide, composed of gossan, prian, peach, mundic, and spar. The ground in the adit cross-cut south is moderately easy.

EAST WHEAL VOR.—Wm. C. Vivian, Sept. 7: Having thoroughly inspected this mine, I beg to hand you the following report thereon:—Old Wheal Vor Main Lode: The engine-shaft has been sunk about 11 ft. under the 70, the sumpmen having since been engaged in cutting piat, road, &c., in the 70. Everything is now nearly complete for again sinking, which will be resumed in a day or two. The lode in the shaft is large, and has less underlie than it had above, which we regard as a favourable indication. The driving of the 70 east has been hindered by the cutting of the piat, &c. In the 70 west the lode is 6 ft. wide, and tinny throughout, but of low quality; judging from the levels above we may expect an improvement in this level shortly. In the 60 east the lode is large, and letting out a large quantity of water, but is not producing tinstuff of paying quality; we are pushing on this level with all the expedition possible, in order to communicate with the winze from the 50, as this will afford ventilation, which we are greatly in want of, and enable us to stope some tin ground standing in the 60. In the 60 west the lode is large and tinny, and of a kindly appearance for further improvement. The 50 west is producing tinstuff of better quality than any other level on this lode, but the lode is small, and should it increase to the regular size of this lode (which seems probable), and retain its present quality, we should be opening through a very valuable course of tin. We have driven the cross-cut north, in the 60, towards Smith's lode, about 22 fathoms, leaving, according to calculation, about 8 fathoms more to drive to reach the object in view; this will take full two months from our next setting-day, Sept. 16.—Smith's Lode: The rise in the back of the 30 being carried up for the new shaft is up about 23 fms., leaving about 8 fms. more to accomplish to communicate with the adit level. The shaft to communicate with this rise has been commenced from the surface, and is down about 4 fms.; this shaft will be complete for drawing through in two months from our next setting-day, and will afford us great assistance in developing this lode, as well as facilitating operations on the Old Wheal Vor main lode, by affording a thorough ventilation. All the ground we have risen through to make this shaft will pay well for stoping, as soon as we have the means of delivering the stuff, and other facilities which the shaft will afford, and we find by the stuff which has already been sent to the stamps that it proves better in stamping than its appearance would indicate. The tin is of splendid quality, and the waste light. We have commenced driving a 16 fm. level east from the rise, in which the lode rather improves in quality than otherwise, and I have, therefore, ordered the same level to be struck off westward also; we shall thus be laying open stoping ground, which will be ready to commence on as soon as the shaft is complete. We are making some considerable and necessary improvements in the pump-work, and shall have everything in a complete state before the winter sets in. The engines have been got into much better order than when we commenced operations, and are working remarkably well. Having hitherto had no stoping ground to work on, our parcel of black tin has not accumulated so rapidly as we could wish, but we shall have a lot ready for sale at our next pay and setting, or as soon after as the committee may think proper.

EAST WHEAL VOR.—J. Pollard, Sept. 14: Old Wheal Vor Main Lode: In the 70, driving west, the lode is 3 ft. wide, yielding tinny work. The 60 east is very wet and spare for driving; lode 2 ft. wide, with occasional stones of tin. In the 60, driving west, we have a very strong looking lode, composed of copper, blende, and mundic, producing pretty good stamping work. The cross-cut driving north from the same level is a little harder for driving. In the 50, driving west, the lode is 12 in. wide, and worth 2*l.* per fathom.—Smith's Lode: In the level driving in the rise no lode is taken down; the lode in the rise is 1 ft. wide, and worth 3*l.* per fm. The sinking of the new shaft is progressing satisfactorily. We shall resume the sinking of the engine-shaft next week.

FRANK MILLS.—W. Nicholls, J. Cornish, Sept. 14: The ground in the engine-shaft sinking below the 100 continues quite as favourable for progress as last reported, and we are, therefore, progressing with the sinking with quite as much vigour. We have suspended the 100 we were driving south on the west lode, and resumed the rise in back of the 100 north; the lode in this rise will yield ¾ ton of lead ore per fm., and it is being prosecuted by four men. The lode in the 84 north is not at present quite so productive, only yielding about ¼ ton of lead ore per fm. We have no change of any importance in either of the 45 fm. level ends. The lode in the wide stope, in back of the 60 north, still maintains its size and value, being still 10 ft. wide, and yielding 2 tons of lead ore per fm.: the lode in the stope in back of the same level adjoining to the south is also quite as large and productive—10 ft. wide, and yielding on an average fully ¾ ton of ore per fm. The remaining tutwork operations present no other feature worthy of remark. The tribute department, we are pleased to state, is also looking quite as well, and yielding equally as much ore, as for some considerable time past. The dressing operations are also progressing very satisfactorily, on the whole, and we hope for an increased quantity of ore.

GAWTON COPPER.—G. Rowe, Sept. 10: The ground in the new engine-shaft is still of a good description, and good progress is being made in sinking; let to 12 men, at 19*l* per fathom, stent the month; meantime we are busily engaged in fixing balance-bob and the necessary appendages thereto belonging.

GLASGOW CARADON CONSOLS.—Wm. Taylor, Sept. 13: There is no change in the value of the lode in the 52 west since my last report, worth 10*l.* per fm., but there is a great increase of water from it, which I think must be from a looser lode ahead; I, therefore, fully expect a change in a short distance further driving. The progress at present is very slow, owing to the lode being wet and troublesome for driving. The stopes are looking very well, and turning out good quantities of ore. No change in either of the cross-cuts; we are pushing on the 65 south as fast as possible, and I hope, if the ground prove favourable for driving throughout the month, by next setting-day we shall be very near, if not into, the lode; this cross-cut is beginning to drain the 52, we shall, therefore, make preparations to sink a winze, and shall commence it as soon as possible. We are getting on very well with ore for next sampling; and shall, I hope, increase the quantity and quality.

GOLCH HILL.—T. Pierce, Sept. 15: In the 60 yard level north the vein is 5 inches wide, producing good stones of lead. The stope in the back of the 60 has improved.

GREAT NORTH DOWNS.—J. W. Crase, M. Jenkin, Sept. 10: There is no change in any of the tutwork operations at Vivian's part of the mine since our last report worthy of remark. Pendarve's lode in the 57, driving west of cross-cut, is 18 in. wide, worth 8*l.* per fm.; this lode in the same level, driving east of cross-cut, is improving, and producing more ore. The lode in Sleggan's shaft is worth 18*l.* per fm. The lode in the 57, driving west of King's shaft, is worth 12*l.* per fm. We will send you a full report of the mine for the meeting on Wednesday.

GREAT RETALLACK.—Wm. H. Reynolds, Sept. 13: The ground in the adit end is of the same favourable character as last reported, and the men are making good progress in driving.

GREAT SOUTH TOLGUS.—John Daw, Sept. 14: Friday last was setting-day. In the 166, west of Lyle's shaft, the lode is still disordered; driving by three men and three boys, at 4*l.* 10s. per fathom. In the 154, west of Lyle's shaft, the lode is 4 feet wide, worth 10*l.* per fm. for tin; driving by four men, 4*l.* per fathom. In the 154, east of cross-cut, the lode is 15 in. wide, producing good stones of copper ore; driving by four men, at 4*l.* 10s. per fm. In the 154, west of cross-cut, the lode is 1½ ft. wide, producing 1¼ ton of ore per fathom; driving by two men and two boys, at 3*l.* 5s. per fm.; about 2 fathoms behind the end we have commenced to rise in back of this level, where the lode is 2 ft. wide, producing 2 tons of ore per fathom; rising by four men, at 4*l.* per fm. We have also commenced to sink a winze below the level, opposite the cross-cut; here the lode is 1¼ ft. wide, producing 1 ton of ore per fathom; sinking by six men, at 6*l.* per fathom. In the 140 cross-cut south we have not yet cut the tin lode; driving by four men, at 8*l.* per fm. In the 140, east of new shaft, the lode is small and unproductive; driving by four men, at 3*l.* per fm. In the 125, west of Lyle's shaft, the lode is 1 ft. wide, composed of peach, spar, and mundic; driving by four men, at 4*l.* 10s. per fm. In the 125, east of new shaft, the lode is small, and disordered by the cross-course; driving by three men and three boys, at 5*l.* per fm. In the 100, east of Noel's shaft, the lode is at present small; driving by four men, at 4*l.* per fm.

GREAT SOUTH TOLGUS—(*Special Report*).—R. Williams, Sept. 8: The copper department of this mine is not very prosperous, and for your purpose little need be said thereof; there are some interesting points, but, on the whole, from present appearances, there will be no immediate move on account of copper production. The prospects for tin are exceedingly good, and the most interesting point for a rise soon is the 166 west; the lode at present is a little disordered, but they have driven far enough to expect daily to come upon a course of tin, not up higher, but lower down, than the 154 fm. level, where the lode in the stopes in back is very good, and the end driving west produces good tinstuff also. On the whole, the deeper parts of the mine, west of the engine-shaft, have a very encouraging aspect, and a rise in the shares may be looked for any day. There is a cross-cut in the 140 south, to see the tin lode at a point far west, which is of some importance, as should the lode be found good there it will open very extensive reserves of tin ground. Of the 112 north I cannot tell what to think or say, and this seems to be the case with those on the mine. If the lode has not been absorbed or incorporated in the space between the 90 and 112, it is very strange indeed that it does not appear. This point to me is at present a pure speculation. I think good may come of this mine.

GREAT WHEAL BADDERN.—John Jenkin, Sept. 9: In The 75 cross-cut, driving north at Hill Brothers, the ground is still favourable for driving, composed of light blue kilins, spar, and prian, with water issuing freely from the end. The men have driven 4 feet in the past week, making in all 8⅛ fathoms from the shaft. The 63 cross-cut continues very hard and spare for driving; no change since last report. The stope on the tin lode, in bottom of the 25, east of Buckley's, is without change to notice since our last communication. Our surface and all other operations are being carried on with all possible speed.

GREAT WHEAL BUSY.—John Edwards, J. Petherick, J. Tredinnick, C. Bawden, Sept. 10: There is nothing new in Harvey's engine-shaft, or in the 140, east and west of ditto; the same remark applies to Offord's shaft and the 130, east and west. The lode in the winze sinking below the 130, east of Harvey's engine-shaft, is 5 ft. wide, and worth 20*l.* per fathom. The lode in the winze sinking in the bottom of the said level, east of Offord's shaft, is worth 45*l.* per fathom for copper ore. The lode in Mathew's shaft, sinking below the 110, is producing stones of copper ore, but not sufficient to value. The lode in the 110, east of the said shaft, has improved a little during the past week, now producing saving work for copper ore. The lode in the 90, driving east of Mathew's shaft, is 5 feet wide, and worth full 35*l.* per fathom for tin. No change to notice in the 80, east of said shaft. The lode in the 70 east is worth 10*l.* per fathom for tin. The stope in the back of this level is worth 14*l.* per fathom.

GRYLLS WHEAL FLORENCE.—Edward Rogers, Edmund Rogers, Sept. 13: In our different points of operation during the past week there is no alteration. In the engine-shaft we have cut water, but are still sinking by nine men, and shall continue to do so until the water increases so as to compel us to stop, and fix the pitwork, the greatest part of which is on the mine.

GWYDYR PARK CONSOLS.—W. Smyth, Sept. 14: In Gwyn Llifon deep adit end the lode is about 6 inches wide, composed of spar, blende, and more faces of lead ore than I have seen there before. No lode taken down in Gwydyr stopes or middle level for the month; I intend to take it down in both places next week. The dressing is going on as usual.

HALLENBEAGLE.—John Edwards, Edward Richards, Sept. 12: The engine-shaft is now cleared from 3 to 4 fathoms below the 40; we find there is a cross-cut driven north by the old workers to intersect the north lode. We also find a level driven east of said shaft, about 30 fathoms, leaving a back of 3 fathoms above the supposed bottom level; the present end not seen; this indicates that we are near the bottom of the mine. At Stone's shaft, sinking below the 40, we have not as yet intersected the lode under the slide. The eastern shaft, on the north lode, sinking below the 36, is producing good stones of copper ore—a little improved during the past week. Bawden's shaft, sinking below the 33, on Read's lode, is 18 inches wide, worth 4*l.* per fathom. The lode in the winze sinking below the 33, on Read's lode, is small and unproductive. We are still clearing the footway-shaft with all speed. We have completed the building of the steam-engine house, and hope to get the main beam up in the course of a day or two. We set, on Saturday last, 12 tribute pitches, varying in tribute from 4s. 6d. to 13s. 4d. in 1*l.* As the water is daily going down, we hope shortly to set some other pitches. We consider, from present prospects, that the mine is opening up well. All our surface operations not previously noticed are progressing satisfactorily.

HARWOOD.—J. Race, Sept. 9: There is nothing new to report from either Scar Head or Trough levels since my last. The end of the drift east in the vein at Scar Head is looking better, getting good stones of ore, and I think by appearances we shall have richer ground in a little time. The stope is worth 8 cwts. of ore per fm.

HAVAN.—G. Jones, Sept. 13: Carriston's shaft is sunk 3 fathoms below the 10 in a very strong lode, in which there is a good mixture of lead ore for the width of the shaft, producing 1 ton of lead ore per fm., or 1¼ ton in the length of the shaft, and likely to improve, as the lode in the bottom at present looks very promising indeed. No change to notice in the 10 east, nor yet in the stopes. Our dressing operations are progressing satisfactorily. We shipped yesterday 50 tons 13 cwts. of silver-lead ore to Messrs. Sims, Willyams, and Co., Llanelly.

HAWKMOOR.—J. Richards, Sept. 13: We are to all appearances through the cross-course, and shall at once prepare to drive north in search of the lode supposed to be hove in that direction. I regret to say that our surface water has again fallen off so much that we cannot as yet fork the underground water. In the back of the adit level the lode produces some good tin work.

HINGSTON DOWN CONSOLS.—T. Richards, Sept. 14: All the productive points are equally as good as when last reported.

KELLY BRAY.—G. Rowe, Sept. 14: The lode in the 70, east from eastern shaft, continues its kindly appearance and character, producing a little ore occasionally, with an increasing quantity of water. The ground in the 60 cross-cut north is without any change in character, being highly mineralised, and showing indications of being near the lode. The lode in the 40 east is improving in character, producing good stones of ore. At the 25, in the most extreme point east from the western shaft, and also for some considerable distance in the previous drainage, we passed through a very promising lode, producing quartz and gossan, with black and yellow copper ore, to the amount of about 2 tons of copper ore per fathom; judging from its general character and appearance, we are inclined to think it possible to be passing over a new shoot of ore, consequently a winze has been sunk near the present end, which is down about 15 fathoms below the level, where the lode is worth 50*l.* per fathom, and likely to improve.

LADY BERTHA.—Capts. Harpur and Metherell, Sept. 15: At the new eastern shaft, sinking below the 41, the men are making pretty fair progress, the ground being favourable for sinking. The ground in the end driving north-east of the above-named level is without any particular change, the lode being about 2 ft. wide, consisting of fluor-spar, mundic, prian, and stones of ore. In the stope in bottom of the 41 west the lode is about 3 ft. wide, composed of quartz, mundic, peach, and ore, worth of the latter 3 tons, or 12*l.*, per fathom. The ground in the 30 end east is still moderately easy for progress; the lode continues small, carrying flookan, mundic, peach, and occasional stones of ore. In the cross-cut driving north of the 10 east we have passed through some small branches, composed of mundic, prian, and spar, mixed with black and yellow copper ore. The pitches in the tribute department are without any material change, producing much as usual.

LANIVET.—J. Tregay, Sept. 10: Vance's Lode: In cutting the plat at the west end of Oulton's shaft the lode is improving, and producing very good stones of tin.—Petrie's Engine-shaft: We are getting on very well with cutting the plat, and hope to cut into the main part of the lode by the early part of next week.

LEAWOOD.—R. Andrew, Sept. 13: Mr. Loam was here yesterday. He told me he saw the cylinder at Plymouth. I expect it will be brought here to-morrow, if it is I will write you. We have sent down 20 fathoms of pitwork, and if the engine were all in we could go to work at once. The masons will finish the stack and boiler-house in a week more. All other work is as forward as we can get it.

LONG RAKE.—F. Evans, Sept. 15: The engine-shaft, sinking below the 80, is down 4½ fms.; the lode has been orey, generally worth 1 ton to the fathom. The 80 east is opening good tribute ground; the lode 2 to 3 ft. wide, driving at 5*l.* 10s. per fm. The 80 west is poor; there is a run of ore before this end, which we expect to cut soon, driving at 4*l.* per fm. The 70 east not driving at present; the endmen are engaged rising against middle shaft; when this is holed, and skip-road down, we shall be able to work the ore ground in this level much cheaper. The rise is worth 1 ton to the fathom; this, as well as the level, is opening good lead ground, and the lode is strong and masterly. The 60 is easier to drive, and worth 15 cwts. per fm. There is nothing particularly new to notice on tribute. The 25 tons of lead ore sold on the 8th inst., realised 14*l.* 1s. 6d. per ton.

MAUDLIN.—J. Tregay, Sept. 10: Old Mine: In the 70 west the lode produces mundic, intermixed with yellow ore.—Coombe: There has not been much done in the end this week, as the men have been engaged clearing the old level to let down water.

MINERA UNION.—Wm. T. Harris, Sept. 15: Brabner's Shaft: The level driving north from the rise, in back of the 80, is yielding good lead, and very promising. The pitch in back of the level, south of No. 2 winze, has much improved, now worth 1 ton of lead per fathom. With these exceptions, there is no alteration in any other part of the mine to notice.

MOLLAND.—T Bennetts, Sept. 14: The lode in the winze sinking below the 62 east is 4 ft. wide, composed of red iron, quartz, and grey copper ore, producing of the latter ⅓ ton per fm. The lode in the stopes in back of the 42 east is still very large, producing 1¼ ton of ore per fm. In the 32 east we have commenced stoping the back, on the north part of the lode, where we have at present a promising branch of ore, producing 1½ ton ton of ore per fathom.

NANT-Y-IAGO.—J. Roach, Sept. 8: The bottom levels here are suspended, and the following bargains let for the present month:—The 20 west, by four men, at 5*l.* 10s. per fathom; lode 5 ft. wide, of the most promising description, producing sufficient mineral to defray the cost for drivage, &c. To stope by four men in bottom of the 10, west of engine-shaft, and west of winze in the 20. To stope by four men in bottom of the 10, east of the above-named winze. The stope east of engine-shaft, in bottom of the 20, by two men. The stope in bottom of the 20, west of engine-shaft, by two men. The above stopes are yielding from 6 to 8 cwts. of ore per fm., and I think they will improve. The carrier is taking off a parcel of lead ore.

NETHER HEARTH.—W. Vipond, Sept. 10: I think we are up to the random of the middle flat in the rise from cross vein level, and I do not think it would be wise to pursue this any further. In the drift the beds are still dipping north and west, as if some vein were near us. The next vein to cut in the level is about 10 fms. before us, and it has been worked to some extent west, but not near to where we shall cut it in this level.

NEW BIRCH TOR AND VITIFER.—Captains Skewis, Trevarthen, and Symons, Sept. 13: The water is again in fork to bottom of the mine, and the stuff being drawn to surface as fast as possible. The lode in the 48 west is large and strong, worth for tin 5*l.* per ton. The winze in bottom of the 36 is now communicated with this level, affording good ventilation, and has laid open a profitable piece of tribute ground for tin and lead. The lode in the 36 west is worth 5*l.* 10s. per fm. The cross-cut south of the 24 west has not yet intersected the lode; there is, however, a little water coming from the end, which leads us to expect we are very near it. The cross-cut south from the 24 east has intersected two small branches, but not to value; there being a very fine congenial elvan for the production of tin in the end, we think it best to continue it a little further. In the 12 west the strata and lode are much improved, and we expect soon a productive lode here.—North Lode: The lode in the 48 east is yielding good saving work for tin. The lode in the 36 west is worth 6*l.* per fm. The 24 is suspended, and the men put to sink a winze in the bottom of the 12, which is worth 12*l.* per fm. The lode in the 12 east is worth 30*l.* per fathom. No change to notice in the tribute department. The lode in Lance's shaft is large and strong, with good stones of tin. The clearing of the adit is progressing satisfactorily, and we calculate to complete by the end of this month about 250 fms., after which the large wheel will be applied wholly to stamping.

NEW CHIVERTON.—J. Juliff, Sept. 13: The men are making good progress in sinking the engine-shaft, which is a good-looking channel of ground, now over 12 fms. below the 30. I hope to get the shaft to the 50 in two months from this time. In the 30, east of cross-cut, the lode is small. In the 20, east of eastern shaft, the lode (2 feet wide) is producing good stones of silver-lead ore. The stopes are worth, No. 1, 6*l.* per fathom, and No. 2, 8*l.* per fm. for lead and blende. We calculate to sample this week 6 tons of lead and 20 tons of blende.

NEW LAXEY.—J. Horsley, Sept. 13: The lode in the shaft continues much the same, both in size and character; the lead is not so good as it has been; I think the bunch of lead that we had is north of the shaft now. We have very good lead coming in the south end of the shaft, so that I think we shall soon have good lead in the shaft again, as the lead appears to be dipping north. The shaft is down below the 60 fm. level 4½ fathoms. The lode in the 60 end is rather changeable; the lead is not altogether so good as it was last week. I think the lead will get better again soon, as the lode is still very kindly, and continues 3 feet wide. We have now about 12 tons of lead on hand.

NEW ROSEWARNE.—E. George, W. Mitchell, Sept. 14: Bickford's shaft is sunk 3 fms. below the 74 fm. level; the lode, since our last report, has improved for copper ore, now worth 40*l.* per fathom. The lode in the 74, west of Bickford's shaft, is 6 feet wide, worth 35*l.* per fathom for tin. The stope in the back of the 74, west of Bickford's shaft, is worth 20*l.* per fathom. The lode in the 67 fm. level, west of Bickford's, is 4 ft. wide, producing good stones of grey copper ore. The stope in the back of the 67, west of Bickford's, is worth 12*l.* per fathom. The lode in the 58 west is 3 ft. wide, composed of spar, mundic, blende, and tin, but not to value. The stopes in the back of the 58, east and west of winze, west of Bickford's shaft, are each worth 20*l.* per fathom. The lode in the 46 fm. level, west of Bickford's shaft, is at present small and unproductive.

NEW TRELEIGH.—S. Michell, Sept. 14: The winze sinking below the 80 continues to yield 3 tons of ore per fm., and the end driving west, in the same level, 2 tons; the lode in this end is looking very promising indeed as it nears the cross-course. We intend sampling next week; I cannot say the exact quantity that we shall have to-day.

NEW WHEAL MARTHA.—H. Rickard, G. Rickard, Sept. 8: Our shaftmen are engaged in casing and dividing the shaft from the 74 to the 86, taking out penthouse, &c., to send the machine kibble to bottom; this we hope to accomplish by the latter end of another week. The lode in the 74 west is producing occasional stones of ore, but not to value. The lode in the same level east is full 5 ft. wide, composed of fluor-spar, prian, and mundic, impregnated with good quality copper ore. The lode in the 64 west is worth from 8*l.* to 10*l.* per fm. for copper ore. The lode in the stopes in the bottom of the 52, east and west of No. 1 winze, is still looking well, worth full 50*l.* per fm. No change has taken place in the 40 west during the past week. The lode in the 20, west of Thomas's shaft, is looking well, worth 25*l.* per fm.; this end has passed through a lode of the above value for 12 fathoms long. The lode in the stopes in the back of this level is worth from 25*l.* to 30*l.* per fm. The tribute department is without any material change to notice.

NEW WHEAL MARTHA.—H. Rickard, G. Rickard, Sept. 15: The sumpmen will complete their preliminary work, such as casing and dividing below the 74 to the 86, putting in footway, fixing lift in cistern, taking out penthouse, &c., so as to resume cutting through the lode at the 86 again on Monday morning, the water being very nearly drained from the 74 above. The lode in the 74 east has a very promising appearance, being more than the width of the end (5 feet), composed of spar, prian, peach, and mundic, with stones of yellow copper ore of good quality. The lode in the 74 west is producing a little saving work, and bids fair for an improvement. The lode in the 64 west, in driving south to hole to the winze sunk below the 52, has improved, worth 2½ tons of copper ore, or 8*l.* per fathom. The stopes, both east and west from No. 1 winze, in bottom of the 52, are worth from 45*l.* to 50*l.* per fathom. In the 40 west we have just intersected the south part of the lode, producing good stones of copper ore and mundic; we cannot ascertain its value as yet, as but little has been done. The lode in the 20 west is not looking so well for copper ore as last week, worth 12*l.* per fathom; the stopes in back of this level are worth 25*l.* per fathom. The tributers pitches are yielding their usual supplies as for some time past. Upon the whole, the mine is looking well. I hope to commence next week in putting in the boiler, having commenced drawing stone, lime, and sand, &c., preparatory to this work, and shall complete it as fast as possible.

NEW WHEAL ROSE.—J. Middleton, J. Hammill, jun., Sept. 13: We are continuing driving south on the lode from Barrow's shaft, and find water issuing freely from the western side of the level. We have set the end for 4 fms., at 30s. per fm.

NORTH BULLER.—R. Pryor, H. Harvey, Sept. 10: The lode in the 100, east of engine-shaft, is without change to notice since last reported. The ground in the 100 cross-cut has become a little harder for driving. The lode in the winze sinking below the 70 is producing fine stones of copper. The 80, on King's north lode, is without alteration.

NORTH CHIVERTON.—J. Hampton, Sept. 15: The lode for lead looks much the same as it has for some time past, but is materially improved for blende, and we shall sample 50 tons of it in a few days, worth in all probability 5*l.* per ton, the quality being of a superior kind. The lode in the new engine-shaft is larger. Nothing else new.

NORTH DEVON.—J. Blamey, Sept. 15: The new caunter lode in the adit will produce ½ to 1 ton per fathom. The great caunter lode, in the winze below the 10, is of enormous size and value. In the south-east end it is full 6 feet wide, nearly solid silver lead ore; in the north-west end about 1 ft. 6 in. wide, and improving in depth; it is also extending both north-west and south-east as we sink. It is, without exception, the richest lode I ever saw in my life. The ground in very hard and wet, so that we cannot make much progress in sinking.—Middle Lode: The stope below the adit will produce 1¼ ton per fathom; the stope below the 10 about 1 ton; the winze below the 20 fm. level 1½ to 2 tons. The aggregate value of the above five points of operation is from 200*l.* to 300*l.* per fathom.

NORTH GRAMBLER.—W. Pascoe, Sept. 13: In the 95, west of the eastern shaft, the lode is 3½ feet wide, and worth from 12*l.* to 15*l.* per fm. In the 85, west of the same shaft, the lode is 4 feet wide, and will produce 1 ton of ore per fm. The engine-house is up, roof put on, and the cutting down of the shaft nearly completed to the 80, and in about a month from this time we hope to be in a position to remove the engine.

NORTH GREAT WORK.—J. Vivian, J. Pope, jun., Sept. 9: The south lode in the deep adit, south of Thomas's shaft, is 6 in. wide, good saving work for tin; set to drive by two men, at 7*l.* 7s. per fathom. The caunter lode in the deep adit, south of Parsen's shaft, is at present hove by an elvan course, we have, therefore, set the end (to two men, at 3*l.* per fm.) for 1 fm., at the end of which, if we do not find the lode, we shall cross-cut. The north lode in the shallow adit, east of Vivian's shaft, is 1 foot wide, saving work for tin; set to four men, at 8*l.* per fathom. The caunter lode in the shallow adit, south of Vivian's shaft, is 2½ feet wide; a very kindly lode, producing rich stones of tin, and saving work throughout; set to drive by six men, at 10*l.* per fathom. At the sump-shaft sinking under the old men's workings, about 16 fathoms before the shallow adit end, the lode is 2½ feet wide, opening ground that will work at a low tribute; set to sink by two men, at 3*l.* 3s. per fm. In the shallow adit, north of Vivian's shaft, the same lode is 18 in. wide, opening tribute ground; set to drive by two men, at 2*l.* 10s. per fm. Our tribute setting is without change.

NORTH SHEPHERDS.—H. Bennetts, Sept. 14: Decimus engine-shaft is sunk 2 fms. 3 ft. 6 in. below the 20 fathom level; the shaft is sinking in a splendid looking country as can be desired for lead. In the 20 end, driving west of engine-shaft, the lode is 1 ft. wide, composed chiefly of flookan and soft spar, and yielding a little lead. In the 20 end, driving east of engine-shaft, the lode is large, yielding a little lead at times; there are great chances of this end improving as we get nearer the north and south lode. The men in the adit shaft are making fair progress in sinking below the surface, the ground is improved, and we hope to make better progress in future.

NORTH WHEAL BASSET.—Geo. Davey, Sept. 14: Main Lode: In the 92, west of Grace's shaft, the lode is 2½ ft. wide, worth 6*l.* per fathom for tin. In the 20 east the lode is 2 ft. wide, worth 4*l.* per fathom for copper ore. In the 20 west the lode is 2½ ft. wide, composed of spar, gossan, and stones of copper ore.—North Lode: In the 32 east the lode is larger, and presents a promising appearance; it is 3 ft. wide, composed of spar, mundic, and copper ore, worth 5*l.* per fathom. In the 20 east the lode is worth 5*l.* per fathom for copper ore. In the 20 west the lode is disordered by the elvan course, and is, therefore, unproductive.

OKEL TOR.—W. Metherell, Sept. 15: From the favourable change taking place in the ground by the side of the lode in the 80, we have determined to drive 2 fms. further by the side of it before cutting in. In the 65 east we continue to drive by the side of the lode; the ground is again stiff for driving through. In the 50 we intend to drive in a south-east direction, to see if the main part of the lode is not thrown south by the flookan. The three stopes in back of the 50 will average 8 tons of ore per fm. In Northey's winze, in bottom of the 50, the lode will yield 6 tons of ore per fm. for its length, 9 ft.; this winze is sunk 12 fms. In the 40 east a small cross-course has intersected the lode, and disordered it for the time; but as the lode gets out of the influence of the cross-course it is again becoming productive. There is no alteration in the pitches.

PEDN-AN-DREA UNITED.—Wm. Tregay, J. Thomas, Sept. 10: Sump: The 130 east end has improved, worth 10*l.* per fm. The 130 west is promising for the production of tin. In the 130 north cross-cut the branch intersected last week has not turned out of much importance, from 3 to 6 in. wide, with spots of tin, and being perpendicular is already in the bottom of the engine-shaft. The 120 east rise is worth 3*l.* per fm. The 110 east end is worth 3*l.* per fm. The 110 west end is worth 10*l.* per fm. The 110 west winze is worth 9*l.* per fm. The 100 east end is not yet sufficiently drained to effect much progress, but the water is somewhat abating. The 100 west end is worth 3*l.* per fm. In the 100 west rise the lode is improving in appearance, and yielding stones of tin. The 90 west rise is worth 8*l.* per fm. The 90 west end is poor.—Cobbler's: The 90 east end is worth 5*l.* per fm. The 90 west end is worth 3*l.* per fm. The 90 east rise is worth 8*l.* per fm. The 68 east end is poor. The 68 west end is worth 7*l.* per fm.

PENHALLS.—W. Higgins, J. Nance, Sept. 10: Engine-shaft: The ground in the 60 cross-cut, north of this shaft, is hard and spare for driving, making much against our progress in extending it towards the lode, the cutting of which we are most anxiously looking out for; in this level south the ground is very favourable for driving. The lode in the 50, driving east on Straggler, is still worth 5*l* per fathom. The stopes on the flat lode in sump-winze are worth full 9*l.* per fm. The 40 cross-cut has gone through another small branch, yielding mundic and a little tin; the symptoms connected with this point are very encouraging.—Fiat-rod Shaft East, North Lode: We have met with the cross-course in the 30, east of cross-cut, which has heaved the lode south, and shall now have to drive after it in that direction. The stope in back of the 20, west of cross-cut, is worth 9*l.* per fathom. The lode in the 20, driving west, north of heave, is 2 ft. wide, worth 11*l.* per fm.; and in the stope in back of ditto, 20 in. wide, worth 12*l.* per fm. There has been no lode taken down in the 20, driving west, south of gossan, since our last report. The stope in the back of this level is worth 9*l.* per fm. The lode in the 20, driving east, south of gossan, continues to be worth 14*l.* per fm.

PENNANCE CONSOLS.—H. Peters, Sept. 14: Fox's shaft, sinking below the 10, by nine men, at 12*l.* per fm., down 8 fathoms 4 feet; the lode is about 3 ft. wide, composed of rich branches of lead, jack, and mundic; it is much improved this week, and by its appearance I think it will make a rich mine in depth. Rosa's shaft, sinking below the adit level, by nine men, 10 fathoms, at 10*l.* per fathom; the lode at the shaft is about 5 feet wide, with rich stones of lead in it; there is a dropper from the north to the south lode, with rich stones of lead in it, and my opinion is that by sinking deeper we shall have a rich lode of lead.

PRINCE OF WALES.—W. Gifford, Sept. 13: In the 30 fm. level, east of Watson's shaft, we are driving on the south branch, being 3 feet wide, composed of capel, peach, and spar, with occasional stones of grey and yellow copper ore. In the 30 fathom level, west of Watson's shaft, no lode has been taken down since my last report.

PROSPER UNITED.—S. Lean, Wm. Millett, Sept. 15: The lode in the 80, east of Louisa's shaft, north of the elvans, is 18 in. wide, composed of prian, spar, and stones of copper ore, and assumes a most promising appearance. The lode in the 70 west, on this part, is worth 14*l.* per fathom for tin and copper. The lode in the 60 west is 2 ft. wide, and will produce 2 tons of ore per fathom. The lode is the 50 west is 18 in. wide, containing occasional stones of copper. The lode in the 80 west, on the south part, is 2 ft. wide, containing saving work for tin. The lode in the 70, west of Hand's shaft, will yield 2½ tons of ore per fathom. The lode in Hill's shaft, sinking below this level, is 2 ft. wide, worth 10*l.* per fathom for tin and copper. All other places without change since our last report.

REDMOOR.—T. Taylor, Sept. 13: The lode in the shaft is 5 ft. wide, containing a deal of gossan, mundic, flookan, and spar, intermixed with black copper ore, and likely to improve at a very little depth. We have re-set to nine men 4 fathoms to sink, divide, case, and fix ladders, &c., per bargain, 40*l.*

ROARING WATER.—Henry Thomas, Sept. 13: On Saturday last, the 10th inst., the following bargains were taken:—Gillman's shaft to sink below the 20, with six men, extend 5 fathoms, at 14*l.* per fathom. The plat is completed, the pent-house put in, and the shaft will be sunk with all possible dispatch. The end to drive west on Grady's lode, from Grady's shaft, with four men, extent 2 fathoms, at 5*l.* per fathom. The lode in this end is producing exceedingly rich stones of ore, and a good mixture of copper throughout the end. I look on this as a very promising lode, and no doubt it will improve going west. The end to drive west, in the same level, on the new lode, with two men, extent 1 fathom, at 6*l.* 6s. per fathom. This lode is also improving in appearance, producing spots of good yellow ore. The level to drive east from western shaft, on Grady's lode, with three miners and six labourers, extent for the month, at 6*l.* per fathom, and to be allowed 3*l.* 15s. for drawing water and stuff. I expect we shall raise good ore, by driving east to meet the level coming west from Grady's shaft, besides leaving good orey backs to stope hereafter. I look on the prospects of the mine as very encouraging.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, Sept. 14: The engine-shaft is sinking below the 60, by eight men, at 15*l.* per fathom; the lode is 12 inches wide, at present poor. The 80 is driving west from Ellen's shaft, by four men, at 50s. per fathom; the lode is nothing to value. The same level is driving east, by two men, at 50s. per fathom; the lode is producing stones of ore. The 60, east of Ellen's, has been driven 2 fathoms 3 feet during the past month, now driving by four men, at 55s. per fathom; the lode is worth 5*l.* per fm., and showing indications of an improvement. The winze below the 50 has been sunk 4 fathoms 2 feet, and is being sunk by six men, at 90s. per fathom; the lode here, for the last 2 feet of sinking, has been small and poor. The 40 east, on the branch, has been driven 4 fathoms 2 feet, now driving by two men, at 42s. per fathom; the lode is of a promising character, producing good stones of ore. We have eight pitches

In the 20 west cross-cut north we have met with some small branches containing copper and lead, but nothing as yet to value. We are pushing on the winze below the 20 west to meet the 40. There is no change to notice in any other part of the mine.

SOUTH DOLCOATH.—Wm. Roberts, Sept. 14: I believe we have intersected the same lode in the 70 cross-cut north; it is about 1½ ft. wide, and although without any ore at present it has a promising appearance, and is such as will, I think, improve as it gets off the cross-course. In the 36 east the lode is 1 ft. wide, unproductive. At the flat-rod shaft, sinking under the 36, lode is 1½ ft. wide, producing 1½ ton of good ore per fm. In the 30, driving west of said shaft, the lode is 1 ft. wide, yielding 1 ton of ore per fm. In the 24 east the lode is small. Our prospects here are somewhat improved, and I believe we shall have a tolerably good sampling next time.

SOUTH EXMOUTH.—J. P. Nicholls, G. Maunder, Sept. 14: The engine-shaft was set to sink on Saturday last, under the 75 fm. level, by six miners and three labourers, for the month, at 10*l.* 10s. per fathom. The lode in the 75 ends, both north and south, are without alteration since last report. The character of the lode in the 45 north is very much improved; the white iron and barytes are wearing out, and the lode now consists of soft spar, quartz, and killas, with a small quantity of blende and lead interspersed, and is altogether presenting a very kindly appearance. There is no other alteration to notice in any part of the mine.

SOUTH HERODSFOOT.—R. Goldsworthy, Sept. 14: On the 2d inst. (setting-day), the engine-shaft measured 15 fms. 1 ft. 6 in. under the 36 fm. level. We have set to sink 1 fm., at 29*l.*; since then we have sunk the shaft about 2 ft. 6 in.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Sept. 10: The lode in the adit west is from 12 to 15 in. wide, of prian, quartz, and gossan, yielding a little tin. We have placed a pare of men to sink a winze below the adit; they have not yet made much progress, but if we can get down a few fathoms we shall be better able to judge of the character of the lode in depth.

SOUTH WHEAL TOLGUS.—Sept. 14: Youren's Lode: The lode at Michell's engine-shaft, sinking below the 150, is 16 in. wide, consisting of peach, mundic, and spar. In the 150 east the lode is 15 in. wide, and the lode in the 150 west is 15 in. wide, similar in character and appearance to the lode at the shaft. The lode in the 140 west is 18 in. wide, producing 1 ton of ore per fm. In the 130 west the lode is 18 in. wide, producing 1¼ ton of ore per fm. The lode in the winze sinking below the 130 west is 2½ ft. wide, yielding 3 tons of ore per fathom; this winze is 5 fms. in advance of the 140. We have four stopes over the back of the 130 west, working by 24 men, each stope yielding 3 tons of ore per fm. The lode in the 120 west is 1 ft. wide, producing 1 ton of ore per fm. In the 110 west the lode is 2 ft. wide, consisting of peach, spar, and mundic. We have taken the man from this and the 100 west to sink a winze. The lode in the 100 west is 1 ft. wide, unproductive. In the 90 west the lode is 1 ft. wide, producing stones of ore. The lode in the winze sinking under the 110 west is 18 in. wide, producing good stones of ore. The ground in the 78 cross-cut south is hard.—New South Lode: In the 64, east of the rise, the lode is 1 ft. wide, consisting of peach, soft spar, mundic, and spots of ore. South Lode: The lode in the 140 east is 3 ft. wide, producing 1 ton of ore per fathom. The lode in the 130 east is 15 in. wide, unproductive. In the 120 east the lode is 2 feet wide, consisting of soft spar, prian, mundic, and stones of ore. The lode in the 110 east is 18 in. wide, consisting of flookan and mundic. In the 100 east the lode and horse of killas mixed up together is 5 ft. wide, producing a small quantity of tin. We have taken the men from the rise or stope in back, over the 100 east, and put them to stope the bottom of the level, where the lode is worth for tin from 12*l.* to 15*l.* per fm.

ST. DAY UNITED.—J. Cock, C. Oates, J. Gilbert, Sept. 10: In Oppie's shaft, sinking below the 184, the lode is 5 ft. wide, and worth 45*l.* per fm. In the 184, east of Oppie's, the lode is 2½ ft. wide, and worth 12*l.* per fm. In the 184, west of Billing's, we have intersected the cross-course, which has at present disordered the lode. In the 174 fm. level end, west of Billing's, the lode is 5 ft. wide, and worth 15*l.* per fm. On the 164, west of Billing's, the lode is 3 ft. wide, and worth 12*l.* per fm. We have communicated the winze from the 154 to this level, which has greatly improved the ventilation. In the 154 fm. level end, west of Billing's, we have suspended the cross-cut north, and put the men to drive on the south part of the lode. At Trussall's, in the 134 west, the lode is 5 ft. wide, and producing a little tin. We are still driving the 124 fm. level cross-cut south, and expecting to cut another part of the lode, as there is much water issuing from the end. In the 104 fm. level cross-cut, north of Trevivian's shaft, we have intersected the tin lode, and driven about 4 ft. through it, which is producing good stones of tin.—Bissoe Pool: In the 104, driving west of Richard's shaft, the lode is 3 ft. wide, and producing 1 ton of copper ore per fm. Richard's shaft, sinking below the 140, is worth 1 ton of ore per fm. In the winze sinking below the 130, west of Richard's shaft, the lode is 5 ft. wide, and worth 2 tons per fm.—East Wheal Malden: In the 20, west of William's shaft, the lode is 2 ft. wide, worth 5*l.* per fm. The 10, west of same shaft, is worth 10*l.* per fm. Our stopes and pitches throughout these mines are looking just as usual.

ST. IVES WHEAL ALLEN.—John Nancarrow, Joshua Daniel, Sept. 15: The 20 west is still driving north in the cross-course; stope in back worth 4*l.* per fm. The stope in back of the 20 east is poor; stope below the level worth 5*l.* per fm. In the winze below the level the lode is still small. The 40 east looks better, and yields tin to save. The ground in the 40 west is rather better. Giesler's carbona is worth 6*l.* per fathom. Charles Frederic's carbona is worth 5*l.* per fm. At the junction of the Standard and Carbona lodes below the 20, where we now commence stoping, the lode is worth 4*l.* per fathom.

ST. JUST CONSOLS.—Wm. Williams, Sept. 13: Our engine-shaftmen have been fixing skip-road, and getting the horse-whim work in order; this work is now nearly complete, and I hope to commence extending the 20, east and west from the shaft, by the end of the week. On the Guide lode we are sinking a winze below the 12 by four men, down 10 ft.; the lode is large, the best part of which we leave standing in the south side, and shall not take it down until we hole on the deep end, which is now under this winze.

ST. JUST UNITED.—J. Carthew, Sept. 14: There is no change of any consequence in the ends and stopes. In the winze sinking under the 62, east of the north lode shaft, we have a good tin lode, which is looking well for holding in depth. We have holed Wheal Venton shaft from the adit in the 20, and set one tribute pitch to four men; the 20 to extend east we have also set; this will go under what is a good-looking tin lode in the level over. The tribute department is looking very encouraging. In my last I informed you of the number of men employed underground; in this I give you those on the surface. Eight men working engine; three smiths and strikers; one carpenter; two men and one boy, sawyers; three men watching stamps; six men landing tinstuff; one man framing tinstuff to stamp; nine men and one boy spalling tinstuff, filling carts, &c.; one man wheeling coals to engines; ten men, eighteen boys, and seventeen girls, dressing tin at steam-stamps; three men, four boys, and two girls, dressing tin at water-stamps; three men and fifteen boys dressing leavings tin.

TOLCARNE.—Sept. 15: Field's Lode: At the engine-shaft, sinking below the 50, the lode is 2 ft. wide, composed of gossan and spar. In the 50, 40, and 20 fathom levels, driving east, the lode averages 18 in. wide, and each end produces good stones of copper ore. In the adit level east the lode is 14 in. wide—a kindly lode, with stones of ore.—North Lode: The ground in the 50 cross-cut is hard. The 40 fm. levels, east and west, are each producing 1 ton of ore per fm. In the 30 and 20 east, a kindly lode, producing saving work.—South Lode: The lode east of adit cross-cut is 6 ft. wide, producing mundic, blende, and stones of copper ore. The adit level cross-cut south is in capel and hard killas.

TOLVADDEN.—F. Gundry, Sept. 10: We have set the following to-day: To sink the engine-shaft below the 93 fm. level by twelve men, at 18*l.* per fathom, formerly 35*l.* per fathom, which was not a price for the men to get wages. To drive the 93 east on the lode by six men, at 9*l.* per fathom. To drive the 83 east by six men, at 3*l.* 5s. per fathom. To drive the 67 west, on the tin lode by six men, at 4*l.* per fathom. To drive the 50 by six men, at 5*l.* per fathom. To drive the 60 by four men, at 2*l.* 15s. per fathom. The tin lode at the 67, for the length of the rise—6 yards, or 3 fms.—will average from 30*l.* to 40*l.* per fathom.

TOLVADDEN.—F. Gundry, Sept. 15: The lode in the 93 is improving, and shows strong signs of approaching ore; the lode will yield at present from ⅛ to ¾ ton of yellow ore per fathom. In the 50 we have just cut the slide; we may now expect an improvement shortly. At the 67, in driving west, the tin course has been a little disordered at the intersection with the copper lode; but the tin lode is again increasing in size, now 12 inches wide, with every prospect of further improving. The men are progressing very favourably with the sump.

TOLVADDEN—(*Special Report*).—R. Williams: There is an improvement here—a discovery of tin of considerable importance westward of the old mine at the 67, west of a slide and an elvan-course; the lode is of a fine description for tin, and for 3 fms. high and 2 fms. long they have taken upwards of 300*l.* worth of tin. The tin buyers offered them 230*l.* for a portion on the floors, while there is a good lot drawn to-day, and considerably more underground. At the 50 the end is now entering the same slide, and in a few days I fully believe they will have the same run of rich ground. There is one fact connected with this discovery, which is that a former party, only two small fields from where this tin is opened, raised upwards of 50,000*l.* worth of tin, and the character of the lode the same as this.

TRELOWETH.—Thomas Richards, Sept. 15: The winze sinking below the 154 is worth 12*l.* per fathom; pay for sinking it, 8*l.* The lode in the 144, east of sump-winze, is worth 11*l.* per fathom. The 134 end east is worth 4*l.* per fm. The 124 end contains stones of ore. The 110 east is worth 5*l.* per fm. The winze under the 134 is worth 20*l.* per fathom. The rise above the 134 is worth 8*l.* The stope above the 134 is worth 14*l.* The rise above the 124 is worth 7*l.* No alteration in the other points of operation.

TRENCROM.—William Arthur, Henry Woolcock, Sept. 10: The lode in the 110, east of Hollow's, is 14 in. wide, worth 4*l.* per fm. The lode in the 100, east of Hollow's, is 10 in. wide, worth 2*l.* per fm. The north lode in the 100, east of Giesler's, is 12 in. wide, producing a little tin. The lode in the 90, west of Giesler's, is 15 in. wide, worth 3*l.* per fm. The lode in the 80, east of Hollow's, is 14 in. wide, worth 4*l.* per fm. There is no change in the 80 and 70, east of Hollow's, since last report. The lode in the 60, east of Hollow's, is 2½ ft. wide, worth 7*l.* per fm. The lode in the 50, east of Hollow's, is 2¼ ft. wide, worth 7*l.* per fathom. The lode in the 40, east of Hollow's, is 1 ft. wide, saving work for tin. Dawe's shaft is sinking below the adit level. The lode at this shaft is 18 in. wide, producing stones of tin.

TREREW WHEAL ROSE.—J. Middleton, W. Billing, Sept. 15: We hope to complete plat at the adit level at Vigur's engine-shaft this week. The skip-road works well.

TREVENEN AND TREMENHEERE.—J. Medlin, W. Tippett, C. George, Sept. 14: The lode in the new sump-shaft, sinking below the 150, has improved, now worth 20*l.* per fathom. The 150 end, west of the above shaft, is worth 3*l.* per fathom. No. 1 stope, in the back, is worth 4*l.* per fathom; No. 2, 6*l.*; and No. 3, 5*l.* per fm. Trevenen engine-shaft is being sunk a little deeper below the 162 for fork, &c.; the lode is worth 10*l.* per fm. No. 1 stope, in the back, is worth 7*l.* per fm.; No. 2, 6*l.* per fm.; and No. 3, 5*l.* per fm. There is no other change since last report to call for remark.

TREWEATHA.—T. Foote, J. Scoble, Sept. 14: The shaftmen are still engaged in cutting bearer-holes, &c., for fixing the lift at the 40; we are doing all that we possibly can to get this work completed, so as to resume sinking the shaft under the 40. There is no alteration in any of the ends or stopes since last report, still being poor. We have to repair our whim, and which we hope to complete by to-morrow. The gigging-machines are working well, and will be a great saving in dressing.

TRUMPET UNITED.—G. R. Odgers, Sept. 10: I have no alteration to report this week, because the men have been engaged fixing the plunger-lift at the 60. We shall now be able to make good progress with the sinking of the engine-shaft.

TYNE HEAD.—G. Millican, Sept. 12: We are still driving through the backbone, with very little alteration to note; ground very hard.

VALE OF TOWY.—Arthur Waters, Thomas Harvey, Sept. 13: Nothing new in either of our bottom ends since last reported on. The 110 is now driven through from Clay's engine-shaft to Field's flat-rod shaft, the communication being effected on Friday last. It will take a week to clear the stuff, put in stull, and fork the water, after which we shall proceed with the sinking of Field's shaft below the 110. We have commenced a rise in the 110, about 16 fms. north of Field's, which will go up through the heart of the bunch of ore in James's late pitch, and enable us to let all the ground from Lewis's winze to shaft at a moderate tribute. In the 110, south of Field's, we are going forth in the country, so as to get as soon as possible into the rich open lode seen in the 100, about 20 fathoms south of the shaft; as soon as the said ground shall have been driven we calculate upon having a winze through it, the lode at the point in question being very favourable for progress.—Tribute: Stickland's, in back of the 124, south of Clay's shaft, is worth 2 tons of blende per fathom; set at 30s. per ton. Harding's pitch, in the 110, between Clay's shaft and the cross-course, is worth 1¼ ton per fathom; set at 30s. per ton. Jones's pitch (late stopes), in back of the 110, north of Field's, is worth 3 tons per fm.; set at 25s. per ton. Williams's pitch (late stopes), in the 110, south of Field's, is worth 3 tons per fathom, tribute being 35s. per ton. Warne's pitch, in the 100, south of Field's, is worth 2 tons per fathom, tribute being 27s. 6d. per ton. Lewis's pitch, in the same level, north of shaft, is worth 1½ ton per fathom; set at 30s. Burn's pitch, in the said level, south of Wenallt's, is worth 1¼ ton per fathom, tribute being 30s. per ton, tributers paying all costs, including dressing. On Saturday last we sampled blende as follows:—No. 1 parcel, 20 tons; No. 2 parcel, 60 tons. These appear to be the best lots we have ever sampled, and we hope to find, on Wednesday next, our calculation verified.

WENTNOR.—J. Roberts, Sept. 14: We have driven a few yards in extension of the old workings reported to be discovered last week, and have cut through two north and south lodes, each containing a little lead. The east and west veins are poor at present; but from indications we expect when they are further opened on to find some good ore, the main vein being disrupted by these repeated crossings.

WEST BEAM.—Sept. 15: We are making fair progress with the cross-cut driving north of Parry's shaft, at the 76 fm. level, and hope to reach the lode in the time set down in my last report—viz., the end of the present month. We have not taken down any of the new north lode in the 55 end, west of Parry's shaft, since my last; the men, however, have a large piece uncovered, which will be broken to-morrow. The 55 end, east of Parry's, on new north lode, is at present temporarily suspended, in order to set the men to sink a winze a few fathoms behind it in the bottom of same level, where we have a very rich leader of tin, worth 15*l.* per fm. The North Beam lode in the 55 end, driving east of Parry's shaft, is at present about 2 ft. wide, yielding saving work for the stamps. No lode has been taken down in the winze sinking on new north lode, west of Parry's shaft, at the 55, since my last, and the men are somewhat retarded in their progress by the influx of water: this, however, will be remedied by the intersection of the lode at the 76 cross-cut. The 45 end, driving west of Parry's shaft, on new north lode, continues in a very favourable channel of ground, and contains a lode about 1 ft. wide, of moderate stamps' work, and showing strong indications of an early increase of value. Our tribute pitches throughout the mine have not undergone much change, and continue to be fairly productive. We have our batch of tin completed, 9 tons, ready for market, samples of which have been sent to the different buyers.

WEST GREAT WORK.—S. J. Reed, Sept. 13: Paull's engine-shaft will be down to the 16 by the end of the present week, when we shall cut plat, and commence to cross-cut north and south to intersect the different lodes. Gregory's lode in the 8, east of cross-cut, has improved, now 15 in. wide, and worth 4*l.* per fm.; west this lode is 1½ ft. wide, and worth 5*l.* per fm. No. 1 lode, east and west of cross-cut in this level, is producing stones of tin, and letting out water freely. No. 3 lode, east from cross-cut, is producing good quality tinstuff, and improving; this lode, west of cross-cut, is also improving, producing saving work. The winze sinking in bottom of the adit east of cross-cut, on No. 3 lode, is worth 5*l.* per fm. Gregory's lode, driving west in this level, is producing good saving work for tin. In the cross-cut south from the new shaft we have met with granite, beautifully decomposed, the first I have seen here, and looks quite congenial for the production of mineral; we are daily in expectation of intersecting a lode.

WEST JANE.—E. Ralph, J. Smith, Sept. 1: Painter's shaft is sunk 8 fathoms below the 30; the lode is 5 feet wide, and worth 10*l.* per fathom. In the 30 east the lode is 6 feet wide, worth 10*l.* per fathom. In the 20 west the lode is 5 feet wide, worth 10*l.* per fathom; looking at the ground taken away from the levels above, we may expect a further improvement shortly. In the 10 east the lode is at present disordered by cross branches. In the winze sinking below the deep adit, east of the engine-shaft, the lode is 5 feet wide, and worth 15*l.* per fathom. The stope in the back of the 30, east of the engine-shaft, is worth 10*l.* per fathom. The stope in the bottom of the 20, east of the engine-shaft, is worth 20*l.* per fathom. The stope in the back of the 20, east of engine-shaft, is worth 12*l.* per fathom. The stope in the back of the deep adit, east of Vinable's, is worth 20*l.* per fathom. The stope in the bottom of the middle adit, east of Vinable's, is worth 12*l.* per fathom. The stope in the bottom of the middle adit, west of Vinable's, is worth 8*l.* per fathom. We have five pitches working in the western part of the mine, at an average tribute of 12s. in 1*l.* We are at present raising more tinstuff than we can stamped, owing to want of water for dressing the same; therefore, we have been obliged to sell about 6000 sacks, or 9 tons, of black tin in the stone during the last three months. This we shall remedy as soon as our surface water increases. Looking at our present prospects, we hope in future to meet our expenses, if we can get 60*l.* per ton for our tin. There are now employed underground 80 men and boys, and at surface men, boys, and girls 128, making a total of 208.

WEST SHARP TOR.—W. Richards, Sept. 13: The late improvement in the 162, west of the No. 4 cross-cut, continues equally as promising, and a little better than when last reported on; this part of the lode, for 4 feet in width, is composed of gossan, iron, quartz, mundic, grey and yellow copper, and good saving work for the whole width of the end. The part of the lode being cut into in the No. 5 cross-cut, 14 fms. in advance of the level, west of the No. 4 cross-cut, assumes a very healthy appearance, and produces good stones of rich quality grey copper ore, green carbonate and red oxide of copper, with other good indications. There is no alteration in the other points since my report for the general meeting.

WEST WHEAL MARTHA.—H. Rickard, Sept. 15: The lode in the north adit level is about 2¼ ft. wide, composed of spar, prian, peach, and mundic, with spots of jack and black copper ore, with a regular underlie about 18 in. in the fathom; a more promising lode cannot be seen, and one, I believe, judging from its present appearance, that will ultimately prove productive. The water is again in fork at the old sump-shaft, and I am waiting your instructions.

WEST WHEAL TOLGUS.—Sept. 14: South Lode: Taylor's sumpmen are engaged in cutting tip-plat below the 75; we must finish the plat before taking down the lode, for convenience. In the 75 east and west we are driving towards the lode, and hope to reach it by the end of this month. The lode in the 65 west is 5 ft. wide, producing 3 tons of ore per fm. The stope over the back of the 65, east of shaft, is yielding 2 tons of ore per fathom, and the stope over the back of the 59, west of the shaft, is producing 1 ton of ore per fm.—North Lode: In the 65, east of Taylor's engine-shaft, and east of the cross-cut, the lode is 18 in. wide, producing 1 ton of ore per fathom, and the two stopes over the back of the 65 are each yielding 3 tons of ore per fm. Nothing new in the 50 cross-cut north.

WEST WHEAL TREVELYAN.—John Harris, Sept. 10: The lode in the 68, east of Charles's shaft, is about the usual size, from 4 to 5 ft. wide, of quartz, iron, &c. In the 68 cross-cut south, west of cross-course, we have met with a branch 18 in. wide, of quartz, iron, and killas mixed together, and appears to be disordered by the influence of the cross-course; it is very spare to drive through. We have some distance yet to drive to meet the lode.

WEST WHEAL VOR.—J. Southey, Sept. 14: The sinking of Gundry's engine-shaft below the adit level is progressing favourably. No change worthy of notice in the adit cross-cut north; the ground still easy for driving. Smith, pitman, and carpenter are busily engaged preparing lifts, &c.

WHEAL AGAR.—William Roberts, Sept. 14: The 110 cross-cut, south from Windstow shaft, is progressing as fast as the nature of the ground will admit, it being still hard and wet for driving. In the winze sinking under the 100 the lode is 1 foot wide, producing saving work for tin. In the 100, driving east, the lode is 2½ feet wide, chiefly spar and flookan. The lode in the 100, east of western engine-shaft, is 2 feet wide, and, although unproductive, it presents a more favourable appearance than for some time previous. In the winze sinking under the 90 the lode is 1½ foot wide, composed of spar, flookan, and occasional stones of ore.—Dobree's Lode: In the 90 west the lode is 1 foot wide, composed of peach, spar, and stones of ore. The other parts of the mine are much the same as last reported.

WHEAL ARTHUR.—J. Carpenter, Sept. 15: We are making fair progress in sinking the north engine-shaft, it is now down 8 fms. below the 40 under adit. The lode in Harris's stope, in back of the 50 west, is yielding 3 tons of ore per fm.—North Lode: The lode in Joryeff's stope, in back of the adit west, is worth 5*l.* per fm. No change to notice in any other part of the mine.

WHEAL BASSET AND GRYLLS.—J. B. Wilkin, W. Harris, W. Oats, jun., Sept. 10: During the past month the winze sinking below the 22, west of Wheal Fat shaft, has been communicated to the rise from the level below, and two new pitches have been set in the adjoining ground. The 30 west has been driven 1 fm. 3 ft. 6 in.; the lode not taken down; set to four men, at 6*l.* per fm. The 30 east has been driven 1 fm. 4 ft.; the lode is large and promising; set to four men, at 6*l.* 10s. per fm. The 40, east of Wheal Fat, has been driven 5 fms. 2 ft.; the lode is large, and producing low-priced stamping work; set the two men, at 8*l.* per fm. A rise in the back of this level has been set to four men, at 12*l.* per fm. A winze has been set to sink in the bottom of the 30, north of Wheal Fat shaft, on the caunter, to six men, at 10*l.*; the lode worth 10*l.* per fm. A rise has been set in the back of the 40, under this winze, to four men, at 6*l.* per fm., and 10s. tribute.—Tyacke's: The cross-cut north of Tyacke's shaft, at the 54, has been driven 1 fm. 5 ft.: set to drive by six men, at 12*l.* per fm.; the shaftmen will now enlarge the plot, and prepare for sinking. The 44, east of Tyacke's shaft, has been driven 2 fms. 4 ft. 9 in. A rise has been set in the back of this level to four men, at 4*l.* per fm., and 2s. 6d. tribute; lode worth 12*l.* per fm. The 44 west, on Harvey's, has been driven 2 fms. 3 ft.; the lode is 2 ft. wide, principally quartz, with a little tin; set to drive by two men, at 8*l.* per fm. The 34 west, on Harvey's lode, has been driven 2 fms. 5 ft. 8 in., opening tribute ground; set to drive by two men, at 4*l.* per fm.; the same level east has been set to drive by two men, at 4*l.* per fm. The 34, west of the cross-course, on Tyacke's lode, has been driven 1 fm. 5 ft.; the lode producing stones of tin. A rise in the back of the 34, on Wilkin's lode, has been risen 4 ft. 4 in.; set to rise by four men, at 8*l.* per fm. Grigg's shaft, sinking upon this rise, has been sunk 1 fm. 5 ft. 8 in.; set to sink by six men, at 8*l.* per fm. The 40, west of Wilkins's shaft, on Wilkins's lode, has been driven 1 fm. 5 ft. 4 in.; the lode is poor; set to drive by four men, at 8*l.* 10s. per fm. Gundry's shaft, sinking below the 50, has been sunk 2 fms.; the lode is poor; set to sink by six men, at 18*l.* per fm. The 50, west of Gundry's, has been driven 1 fm. 3 ft. 6 in.; the lode not taken down. The same level east has been driven 3 fms. 5 ft.; the lode is worth 12*l.* per fm.: set to drive by four men, at 4*l.* per fathom. The 40, east of Gundry's, has been driven 4 fms. 2 ft. 4 in.; the lode is poor; set to drive by four men, at 4*l.* per fm.—Wheal Foster: Drigger's shaft has been cut down and repaired 2 fms. under the 25, cistern plat cut, and the lift fixed; we are now preparing another lift to drop below, which will reach the bottom of the mine. The 25 has been cleared 10 fms. east, and 4 fms. west of Drigger's, the lode being all taken away. The cross-cut, south of Drigger's shaft, has been cleared 60 fms. to the Garlidna lode, and Priske's shaft has been cleared and secured to the 15, and a whim erected on it; we shall now proceed to clear east and west on this lode, and south to the Dippa lode. A winze sinking below the 15, on Cope's lode, has been sunk 3 fms., opening tribute ground; set to sink by four men, at 5*l.* 10s. per fm. The 15 has been cleared west, on Bennett's lode, 7 fms., and east 5 fms.; the lode all taken away. From what we have seen in opening up this mine, we have every reason to think that large quantities of tin have been raised from it, and we hope soon to reach the bottom, and do as others did before. Tin sold last four weeks, 20 tons 4 cwts. 0 qr. 9 lbs., realising 1201*l.* 13s. 6d.

WHEAL CREBOR.—J. Gifford, Sept. 13: Cock's Shaft: The lode under the cross-course, so far as seen, is 6 ft. wide, and no north wall seen yet, it is composed of capel, peach, quartz, and mundic, and yielding good stones of copper ore; although not rich enough as yet to set any value upon, yet we are saving it for dressing, and from its present appearances and character I am daily expecting a great improvement. In the 96 west we are still driving by the side of the lode, where we shall have near 4 fms. desued, which I have no doubt will turn out a splendid pile of ore. We shall begin to take it down on Monday next. In the 96 east we are taking down the lode, which is yielding 1½ ton of copper ore per fathom. This is the first shoot of ore met with in the 84. The shoot of ore which the winze was sunk on, and held down from 6 to 7 fms., is still in advance of the 96 some 3 or 4 fms., owing to the dip of the run of ore ground. In the 84 east the lode is small and poor. A splice appears to be coming in on the foot-wall, which I think is the main part of the lode. In the 72 east the lode is 2 feet wide, yielding 1½ ton of copper ore per fathom—a promising end. The stopes and tribute departments are without any alteration to notice. The mine altogether is looking well, and fully carrying out my report for the last meeting.

WHEAL CROFTY.—H. Skewis, Sept. 14: The rise in the back of the 70, on north lode, will be holed to the 55 this week, after which the men will again resume driving the 70 west, and the 55, west of the cross-course. Square's shaft, sinking below the 44, and the rise against this shaft in the back of the 70, we hope will be communicated in about four months from this time, when we shall be able to clear out the 70 south, and drive on the course of the lodes, and, from the information of the former agents, we shall then lay open some tribute ground. The lode in the 24, west of the cross-course, and south of Square's shaft, is 1 ft. wide, worth about 6*l.* per fathom for tin. The lode in the 24, west of Mayne's shaft, on the north lode, is 15 in. wide, composed of spar, capel, and mundic, with a promising appearance.

WHEAL CURTIS.—H. Skewis, Sept. 13: Having holed the 30 fm. level cross-cut north to the old workings, we have not been able to work in this part of the mine for the last week. The water is now in fork 3 feet below the back of the 30 fm. level in the old mine and the bottom of the engine-shaft. The shaftmen are now cutting plat in the 40 fm. level, and we hope to set the cross-cut north in this level next week. We have been in the 30 fm. level west, on Curtis's lode, to-day; the lode in the end, as far as can be seen, is 2 ft. wide, composed of spar, jack, and good stones of copper ore, with a very promising appearance. We cannot say anything about the old mine east of this place, as the water is not sufficiently drained to go back through the level. The skip-road is fixed in the old engine-shaft down as far as the 10 fm. level, where we find a choke in the shaft, therefore we cannot go any further until this is cleared.—Dumpling Lode: The lode at Square's shaft is 2 feet wide, and worth at present 8*l.* per fathom. The lode in the 10 west is 2 feet wide, producing good stones of copper ore, with a promising appearance. The lode in the 10 east is 3½ feet wide, producing good stones of copper ore. The lode in the winze sinking below the adit, east of Square's shaft, is 2½ feet wide, composed of spar, and producing occasional stones of copper ore; this part of the mine is opening up quite as well as we could expect at this depth.

WHEAL EDWARD.—Geo. Rowe, Sept. 10: This being our monthly setting-day, the following bargains were set:—Coad's stope, in bottom of the 81 west, by six men, stent the month, at 3*l.* 5s. per fm.; the lode in this stope is worth from 8*l.* to 10*l.* per fm. Patter's stope, in bottom of same level, by six men, stent 4 fms., at 3*l.* 15s. per fm.; the lode in this stope is worth 6*l.* per fm. The 61 west, to drive by four men, stent 2 fms., at 6*l.* 10s. per fm.; the lode in the present end is 1 ft. wide, producing spots of ore. The 50 west, on the new south lode, to drive by four men, stent 2 fms., at 6*l.* 15s. per fathom; the lode in the present end is producing a little ore, but not sufficient to value. Wedge's stope, in bottom of same level, by four men, stent 4 fms., at 4*l.* per fm.; the lode in this stope is worth from 5*l.* to 6*l.* per fm.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Sept. 10: The lode in the 120 west is large, and yielding good stamping work; the end is getting wetter, and the tin stronger, which we think an improvement. At the 110 we are now engaged stripping down the bunch of ground from the winze, and which is worth from 30*l.* to 40*l.* per fm. The lode in the 100 east is from 3 to 4 ft. wide, and worth 8*l.* per fm. The stope above the 100 east is worth 12*l.* per fm. The stope above the 100 west is worth 25*l.* per fm. The stope above the 100, east of western winze, is worth 10*l.* per fm. In the 90 east we have discovered a lode on the north side, and which is yielding good work for tin; we will state its value next week. The lode in the stope above the 90 east is worth 15*l.* per fathom. The lode in the stope above the 90 west is worth 25*l.* per fm. The lode in the winze sinking below the 80 east is worth 15*l.* per fm. The lode in the rise above the 80 west is 3 ft. wide, and worth from 15*l.* to 18*l.* per fm. The stope above the 80 is worth 26*l.* per fm. The 66 west is worth from 12*l.* to 15*l.* per fm.

WHEAL GRYLLS.—E. Rogers, J. Pope, Sept. 15: Fisher's Lode: In the 40 end, east of Annie's engine-shaft, we are driving by the side of the lode, by reason of the ground being so wet and troublesome. In the 30 fm. level, east of Gryll's whim-shaft, the lode is a little improved, worth 7*l.* per fathom. In the 10 end, west of Jones's shaft, the lode is 18 inches wide, yielding a little tin. In the adit level, west of this shaft, the lode is small and poor. In this level, east of the western shaft, the lode is 1 ft. wide—unproductive.—Standard Lode: In the western whim-shaft, sinking below the deep adit, the lode is 18 inches wide, worth 3*l.* per fathom. In the winze sinking below this level there is no alteration; the lode is 5 ft. wide, worth 12*l.* per fathom. In the 15 fm. level, east of Badger's shaft, the lode is 2 ft. wide, worth 1*l.* 15s. per fathom, which is the present price for driving.

WHEAL HARRIETT.—S. Williams, Sept. 10: The lode in the 130 east end is 1¼ ft. wide, producing stones of tin. The north part of the main lode, in the 115 end, west from east cross-cut, is 6 in. wide, unproductive. The north lode in the 115 west end is producing stones of copper ore. The stope below the 100, west from winze, is worth 8*l.* per fm.[2] for tin. Alexander's lode, in the 24 west end, is producing stones of copper ore. The adit cross-cut is progressing favourably.

WHEAL HARTLEY.—P. Skewis, Sept. 14: The engine-shaft is sunk 9 fms. below the 10; lode 3 feet wide, of a promising character, composed of quartz and peach, with stones of copper ore. The 10 is driven west of engine-shaft 34 fathoms; lode 3 ft. wide, composed of gossan, quartz, and mundic; driving by two men and two boys, at 40s. per fathom; the same level is driven east of engine-shaft 28 fathoms; lode 2 feet wide, composed of quartz, gossan, and green carbonate of copper; driving by two men and two boys, at 50s. per fathom. In the deep adit, driving east of the adit shaft, the lode is from 5 to 6 feet wide, with a very promising appearance, composed of gossan, quartz, and tin; driving by two men and two boys, at 40s. per fathom. The adit is driven north on the silver lode 22 fathoms; lode 2½ ft. wide, composed of gossan and quartz; driving by two men, at 46s. per fathom.

WHEAL HEARLE.—J. S. Phillips, Sept. 10: The following are the operations, prices, and values for the week, as per month's setting:—The 130, to be driven east and west of skip-shaft, at 70s. and 80s.; and east and west from bottom winze, at 100s. each per fm. The 122 east, west, and south, at 70s, 80s. and 180s. respectively; and the 110 west, at 90s. per fm. The three winzes are completed. Eight stopes in 122, 110, 100, and 90, at an average of 38s. produce, as usual. Our next sale of tin will realise about 400*l.* at present price for tin, which will more than meet our working costs.

WHEAL HOPE.—W. H. Reynolds, Sept. 13: The lode in the 85, east and west of engine-shaft, yields a little lead, and has a promising appearance. In the 75 cross-cut south, to cut the main lode, the ground is favourable, and there is an increase of water. We have commenced to drive east of engine-shaft on a part gone off south of that on which the level is driven, and which is 3 ft. wide, composed of prian, spar, and mundic, with spots of lead. The 65 west we have re-set to two men, and the lode looks likely to improve. In this level east we have put the men to strip down a part of the lode which has gone off south, and which is made up of a large capel, with spots of lead. In the 65 cross-cut south we have not yet cut any lode. The other parts of the mine are just as last reported.

WHEAL KITTY (Uny Lelant).—W. Williams, Sept. 15: There is no change to notice.

WHEAL KITTY (St. Agnes).—S. Davey, W. Polkinghorne, Sept. 10: At Holgate's shaft we are pushing one the driving of the 82, west of shaft, with all speed. There is no alteration in the 54 cross-cut, north of old lode, since our last report.—New Shaft, Pryor's Lode: The lode in the 63, west of shaft, is still 3½ ft. wide, worth for tin 22*l.* per fm. We have put the 65 eastern endmen to sink the new shaft, in order to have air, which will be holed in the coming week. In the 54, driving east of shaft, the lode is worth for tin 8*l.* per fm. In the 54, driving west of shaft, the lode is without change; still worth for tin 12*l.* per fm. In the 44, driving east of shaft, the lode is worth for tin 9*l.* per fm. The 44 western endmen are still engaged in sinking, not having made the progress we anticipated, owing to the ground being much harder than we had reason to expect. In the 34, driving east of shaft, the lode is 2 ft. wide, worth for tin 5*l.* per fathom, in the winze below this 8*l.* per fm., and in the rise for new shaft, in back of ditto, also 8*l.* per fm. The lode, or branch, in the 24, driving west of cross-cut, is disordered by the cross-course that is draining Wheal Vottle. There has been no lode taken down of late at the new shaft. All other places looking much as usual.

WHEAL NORRIS.—J. Andrews, Sept. 14: At our setting-day the following bargains and pitches were set:—Carter's shaft to sink below the 45, by nine men, at 30*l.* per fm. The 45 end to drive east of Carter's shaft, by six men, at 5*l.* 10s. per fathom. The 35 cross-cut to drive south of the above shaft, by six men, at 3*l.* 5s. per fm. The 35 end to drive west of cross-cut, on No. 3 lode, by six men, at 4*l.* per fm. No. 2 pitch in back of the 35, by four men, at 7s. in 1*l.* No. 1 pitch was refused at 4s. 6d. in 1*l.*

WHEAL POLMEAR.—F. Barratt, jun., Sept. 13: Ploughshare Lode: The western, or tribute, part still looks well; the lode worth 20*l.* per fathom. The eastern winze is down 5 fms. under the adit, and is perfectly dry; lode 6 ft. wide, worth 6*l.* per fathom. Luke's shaft is sunk 3 fms. under the adit on the course of the lode; the lode has much improved in the last day or two, and is now worth from 8*l.* to 10*l.* per fathom; this shaft is 14 fms. east of the eastern winze.—Crooked Lode: This lode seems to be also drained; we have a winze sinking on the course of it, which is down 3 fms. under the adit; the lode is small, but produces rich stones of ore, and we expect it will soon improve. Smyth's shaft is sunk 12 fms. under the adit; the flat rods are completed and set to work. The men have commenced driving the 12 fm. level north to cut Smyth's lode. The other parts of the mine are without alteration.

WHEAL PROSPER.—S. Mitchell, Sept. 15: We are driving east and west at water level, in the new shaft, and each end is producing good work for tin. The is more water in the cross-cut, in the 40, which indicates being near the lode; the ground is congenial for mineral, with stains of copper. This leads me to believe there is a good lode before us. I hope this will soon drain the shaft, to enable us

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GOLD IN WALES.—Castell Carn Dochan Gold Mine returned for the week ending Sept. 13, 5 ozs. 5 dwts. of gold, from 20 cwts. of stuff, making a total of 83 ozs. 7 dwts. of gold since May 21.

CLIFFORD AMALGAMATED.—A new lode has been cut north of Buzza's shaft, worth 120*l.* per fm., which is supposed to be in whole ground throughout the mine. An important improvement is daily expected in the 212 west, in advance of which a splendid lode has gone down below the level above. The mine has not looked so promising for a long time past.

EAST GRAMBLER.—This promising sett has been divided from Gramblerand St. Aubyn. The promising lodes which are known to pass through the sett render it one of the best pieces of unwrought ground in the parish of Gwennap.

NORTH DEVON SILVER-LEAD MINE appears to be making rapid strides towards the Dividend List. The last bi-monthly sale of ore realised about 510*l.* The present month's returns are estimated at 30 to 40 tons, say, 400*l.* This will give a clear cost. profit on the working expenses, the monthly cost amounting on the average to less than 200*l.* The great exanter lode, which has at present been seen only in the 10, where it is worth upwards of 100*l.* per fathom, will be cut in the 20 and 30 fm. levels in the course of a few weeks; and as this rich lode is evidently extending in the winze, there is every prospect of a large extent of very rich ore ground below this level as soon as it can be opened on.

BRONFLOYD UNITED.—A vast change has taken place in the value of this mine. The extraordinary run of ore from which all the late and important returns have been made at and above the 40, has been discovered by a cross-cut from a deeper level (the 52), and is worth more than 1 ton per cubic fathom. The same lode in the 40 was 7 fms. wide, and yielded for its whole width about 9 tons of lead ore per fm. in length, and proved to be about 20 fms. long; and, as this new discovery leaves 12 fms. of ore ground unexplored, it will, at the same average, yield 2160 tons of lead ore, which, at present value, is worth 31,000*l.* Here is another proof of the advantage of prosecuting at deep levels the rich-bearing lodes of Cardiganshire; in fact, wherever so tried—*i. e.*, upon a lode which proved profitable shallow, it would be difficult to record a single instance of failure. So soon as the cross-cut from the same level, but nearer the shaft, is opened to the south lode, arrangements will be made for putting the shaft down an additional 13 fathoms, or 65 fathoms from surface.

PENDEEN CONSOLS.—The shaft is rapidly sinking, the ground being very easy; the men have engaged to sink it at 13*l.* per fathom. There is every probability of the shaft being on the top of a rich bunch of tin, as the further it is sunk the more valuable it is becoming; indeed, the mine has every appearance of improving. The various points in operation are worth above 170*l.* per fathom. The 142 south may any day be expected to reach the run of rich tin ground discovered in the levels above.

CARN CAMBORNE continues to improve; the floors are full of ore, and they will sample full 50 tons on Wednesday. It is time the agent should enlarge the floors; from the present appearances and future prospects it is not too much to expect 100 tons monthly. I find the great north lode in the 30 is worth 4 tons per fathom in the rise against the winze, and that each end of the stope will turn out 1 ton per fathom; the lode is full 7 feet wide. The 30 west, on the new south lode, is worth 1¼ ton per fathom, and the 30 east, 1 ton per fathom; the stope in the same, rising against the winze, is worth 2½ tons per fathom; the 13 west, on Clarke's lode, is worth 1¼ ton per fathom. The branch of grey ore continues about 8 inches wide in the western shaft. Altogether the mine is looking well, and greatly improved in a week.

NEW ROSEWARNE.—An important discovery is reported here of a rich course of grey ore, producing 50 per cent., in the bottom of the shaft, valued at 60*l.* per fm.; the 74 west is worth 35*l.* per fm.; the stopes in the bottom of the 58, 20*l.* per fm.

WEST CONDURROW has reappeared, and likely to become a favourite mine, not from any recent discoveries in the mine, but from the fact that all the lodes that are now so productive in Carn Camborne run into West Condurrow sett, and they are adjoining setts. These lodes make shallow, and if I am correctly informed by the agents, they intend sinking costean pits at once to discover these lodes.

WEST VOWNAG.—Shares in this mine are firmly held. The expectation of a good dividend before the end of the year is the cause. There will be 300*l.* warth of lead in store by the end of this month, although the shaft was only completed to the first level in August. The shaft which is sinking to the 25 fm. level is making good progress in a similar channel of ground to the Deborough Mine, which produced before reaching the water level nearly 300,000*l.* worth of lead. This channel of ground is supposed to extend east to meet another lode discovered in this sett; and it is expected that all the veins which it intersects will prove highly productive, this rule, from past experience in the district, having held good.

SOUTH LOVELL.—The most satisfactory progress is being made with the development of this property, and the general prospects are encouraging.

WHEAL CURTIS.—The cross-cut north at the 30 has this week been holed to the old workings. The water is not yet sufficiently drained to allow a thorough fuspection, but as far as can be seen the Curtis lode, in the 30 west, is 2 ft. wide, composed of spar, jack, and good stones of copper ore, presenting altogether a most promising appearance; this is of immense importance to the mine. The cross-cut at the 40 will be set in the course of next week, so that within a very short time, as the ground is remarkably easy, we may expect very good returns, as the mine will be opened up below the orey ground which made such large returns in the last working. The Dumpling lode still looks well, and more tribute pitches will be opened up shortly. There cannot be a doubt that Wheal Curtis is one of the most promising progressive mines in the county of Cornwall.

CRANE.—There are very strong branches of spar, mundic, and copper ore in the bottom of the engine-shaft, sinking below the 80, the best indication we have ever had for something good at the 90 when the lode is cut. The lode in the 80 west is 1 ft. wide, composed of spar and jack, with sprigs of ore. The lode in the 60 west is 1 ft. wide, composed of spar, jack, and good stones of ore. The lode in the winze sinking below the 80 is 1 ft. wide, producing good stones of copper ore; this winze will be holed in about a fortnight, when we expect to lay open more tribute ground. There are seven tribute pitches on this lode, at prices varying from 9*s.* to 13*s.* 6*d.* in 1*l.*, and the men are getting good wages. The lode in the Brigan shaft is 2½ ft. wide, producing spar, mundic, jack, and good stones of ore, with a most promising appearance. We shall sample 25 tons of copper ore on Tuesday next, and altogether the prospects of the mine are better than at any previous period.

TRELYON CONSOLS.—The branch in the bottom of the 20, reported last week as being worth 20*l.* per fathom, is now worth 40*l.* per fathom, and still improving, and supposed to be opening a carbona.

GRYLLS WHEAL FLORENCE is looking well: the lode in bottom of the shaft, at the 50, is worth from 30*l.* to 40*l.* per fathom for tin, besides producing on the back some rich copper. This mine is worked dry to the 40, is situated in the Grylls district, the shares are well held, and there are several thousand pounds in hand to give the mine a good trial; so there is little doubt but that this mine, so soon as the stamps are put to work, will be in the market with large quantities of tin, and will be one of the trumps of 1864. A report is expected next week from Mr. John Hitchins, who is in Cornwall to inspect this valuable property.

NORWEGIAN COPPER COMPANY.—The shares in this company are now being delivered in exchange for bankers' receipts. Capt. John Holman, the manager, has arrived in Norway, and reports that he has engaged five men in clearing away rubbish, preparing a smiths' shop, and house for the workmen to change their clothes in. Four concessions were read up at the church on Aug. 28, and two or three more were to be read on the following Sunday.

STEAM-BOILER INSURANCE.—Some five years since a few enterprising gentlemen at Manchester combined to form a joint-stock company, the object of which was to reimburse the owners of steam-boilers in the unfortunate event of an explosion; and to secure a given fixed sum per head to all persons injured by the explosion of a boiler insured by the company. The Manchester Association for the Prevention of Steam-boiler Explosions had for some time previously been exerting themselves most successfully in securing increased attention to the state of the boilers in use amongst its members, and the enormous amount of steam-power employed within a very limited area afforded them the best possible opportunity of commanding success. Now, as the Association for the Prevention of Steam-Boiler Explosions, which is a mutual society, had proved the explosion of a boiler under their care to be a rare occurrence, the thought very naturally occurred that the insurance of the boilers under inspection could be profitably undertaken, and the Steam-Boiler Insurance Company was, therefore, formed. The boilers likely to be offered for insurance were classified under four heads, and the premiums were arranged according as the safety-valve was loaded to 20, 40, 60, or more pounds. The best class of boiler working at less than 20 lbs. was charged 15*s.* per annum, or if worked at 60 lbs. or upwards 1*l.* 10*s.* The lowest class was charged 1*l.* 10*s.* if worked under 20 lbs., and 2*l.* 5*s.* if over 60 lbs., intermediate pressure being, in all cases, proportionately taxed. By the payment of 1*l.* per annum an engineman, stoker, or other person attendant upon boilers or engines, could be secured 100*l.* in case of death by explosion of the insured boiler; and a payment of 50*l.* per head could be secured upon all the workpeople employed by the payment of 1*s.* per head per annum. Mr. R. B. Longridge, who had for four years been employed as inspecting engineer of the original company, was appointed chief engineer, and a large number of those previously members of the Association for the Prevention of Steam-Boiler Explosions availed themselves of the insurance principle. A general undertaking—THE UNITED KINGDOM STEAM-BOILER INSURANCE COMPANY, to the formation of which we alluded in last week's *Mining Journal*, has now published its prospectus, the object being to conduct a business similar to that which has been so successful at Manchester, but extending to the insurance of boilers in every part of the kingdom. The prospectus states that the Manchester company has realised profits varying from 20 to 45 per cent., whilst it is said that their transactions are of a most limited character. It is estimated that not more than 10 per cent. of the steam-boilers in the manufacturing districts are insured from risk of explosion, and it is observed that if with this small average local companies can pay 40 per cent. per annum, it may reasonably be expected that, with an extensive staff of agents and superintendents, similar results will attend the operations of the United Kingdom Company.

EFFECT OF LIGHT ON THE MAGNETIC NEEDLE.—Few persons are aware of the fact that light exerts a perceptible effect on the action of the magnetic needle. The Swedish philosopher, Wrede, totally excluded light from his magnetic observatory, with the exception of a subdued light at a considerable elevation vertical to the horizontal needle, while the arc was read off by a telescope, at a distance of several yards from the instrument. Means, with the same end in view, ought to be adopted in every magnetic observatory, otherwise no reliance can be placed on the observations. It is evident that the more deliberately the magnetic needle is suspended, the more obnoxious it will be to the effect of artificial light in the operation of reading off the instrument. In proof of the effect of every description of light on the magnet, Sir John Ross mentioned that, during his last voyage in the *Felix*, when frozen in about 100 miles north of the magnetic pole, he concentrated the rays of the full moon on the magnetic needle, when he found it was five degrees attracted by it.

THE FRENCH COAL TRADE.—The French have not yet relieved themselves of the "tributes" which they pay to foreign countries in the matter of coal, and against which such indignant declamations have been indulged in in some quarters. Thus, in the first seven months of this year the imports of coal from England amounted to 767,947 tons, while those from Belgium were 1,730,893 tons; those from the German Association, 478,984 tons; and those from other countries, 1413 tons; making a total of 2,978,337 tons. The imports of coke from England in the same period were 3896 tons; those from Belgium, 247,077 tons; those from the German Association, 117,913 tons; and those from other countries, 24 tons. Five years previously—that is, in 1859—the total imports of coal into France were as follows:—

From Belgium	Tons	3,245,802
„ Prussia		1,015,540
„ England		1,295,872
„ Other countries		2,172=5,759,386 tons.

Assuming that the importations for the first seven months of 1864 are continued at the same rate to the end of the year, the following totals would be arrived at:—

From Belgium	Tons	2,967,245
„ Prussia, &c.		821,115
„ England		1,316,481
„ Other countries		2,422=5,107,263 tons.

Although the reduction is not material, yet, having regard to the greatly increased consumption of coal in France, the inference is suggested that the indigenous production of combustible is becoming more equal to the industrial requirements of the empire. For many years to come, however, the "tributes" will still have to be paid.

EXPORT OF COAL TO PRUSSIA.—The remarkable decline in the exports of coal to Prussia, to which we called attention some months since in the *Mining Journal*, still continued at the date of the last official returns. Thus, in July, the total exports of coal, &c., in that direction amounted to 12,272 tons, against 61,653 tons in July, 1863, and 58,588 tons in July, 1862. In the seven months ending July 31, the total exports of coal, &c., to Prussia were only 82,658 tons, against 304,995 tons in the corresponding seven months of 1863, and 282,699 tons in the corresponding seven months of 1862. The extended utilisation of Westphalian combustible is assigned as a cause for this state of things, but it is also attributable to the disorganisation of Prussian commerce by the Dano-German war. Thus the total exports of cotton yarn to Prussia in the seven months ending July 31 amounted to 87,739 lbs., against 1,223,283 lbs. in the corresponding period of 1863, and 4,576,295 lbs. in the corresponding period of 1862. Of linen manufactures, again, the exports to July 31 this year were 213,969 yards, against 454,158 yards in the corresponding period of 1863, and 1,212,199 yards in the corresponding period of 1862. It will be curious to observe, now that hostilities have been suspended between Prussia and the German powers, whether the exports of coal will revive; probably they will to some extent.

PETROLEUM AS FUEL.—Even the Americans themselves appear now willing to admit that petroleum is no so desirable a substitute for coal as a fuel for steam-boilers as was by some supposed. It is remarked that even the extracts from the report of the (United States) Navy Commissioners betray such an unwarrantable carelessness, either in the manner of conducting the experiments, or in preparing the report upon the same, or both, as to entirely divest them of all practical value. A very slight knowledge, moreover, of the chemical facts connected with combustion is required to prove that at the lowest price of crude petroleum its introduction as a fuel capable of competing with coal is one of the wildest dreams that ever was conceived by an enthusiastic projector. The practically useful constituents of all varieties of ordinary fuel are two—carbon and hydrogen. In some instances, as in coal and wood, oxygen is also present, and is so much loss; this is absent in petroleum. The products of the combustion of these two elements—carbon and hydrogen—are carbonic acid and water; provided the substance is perfectly burnt, when the amount of heat given out by the same material is perfectly fixed and invariable, whatever may be the circumstances under which it is burnt, and whether the combustion be effected quickly or slowly. The most important consideration connected with any fuel is the amount of heat it gives out during combustion. Fortunately, the relative amount of heat given out by equal weights of different fuels can be ascertained with a great degree of exactness. It has been found by direct experiment that one part of carbon in burning unites with two and two-thirds of oxygen; and that, during its combustion, sufficient heat is produced to raise the temperature of 8080 parts of water one degree of the centigrade thermometer. It has also been found that one part by weight of hydrogen unites, when burning, with eight parts of oxygen, and produces sufficient heat to raise the temperature of 34,000 parts of water one degree centigrade. Hence, the heat-producing powers of carbon and nitrogen are as 8 to 34; or, in other words, hydrogen, in burning, gives out, in round numbers, four times as much heat as carbon. It makes no difference whatever to the heat-producing power of these two substances, whether they are burned separately or in combination; and, if the amount of carbon and hydrogen in any compound, such as coal or petroleum, be known, the amount of heat given out by its burning can be at once determined by a simple calculation. The relative amount of carbon and hydrogen in petroleum is about six parts of carbon to one of hydrogen; whereas in coal the amount of hydrogen is less in proportion, and there is also a small amount of oxygen present, which diminishes the heat. The result is that the heat-producing power of petroleum is greater than that of an equal weight of coal; it is, in fact, about half as much again. Even assuming that one ton of petroleum has twice the heating power of one ton of coal, the use of the former would be by no means desirable, owing to the enormous difference in price. A great stress is laid upon economy of stowage; but as coal is half as heavy again as petroleum, it follows that, making every allowance for the loss of space caused by the interstices of the broken coal, there would be little advantage gained in this respect by the use of petroleum. It would doubtless be interesting were the profitable employment of petroleum for making steam be demonstrated beyond a doubt, and we would throw no obstacle in the way of such a result; but we conceive that we are doing good service to all parties in placing before them whatever information can be obtained from any source regarding the uses of this comparatively new article of commercial industry, even though it should seem to be against its introduction into more extended channels of trade.

SMELTING IRON ORES.—An improvement has been patented by Mr. B. Samuelson, of Banbury, which relates to the heating of the air used in hot-blast furnaces for smelting iron ores. This, as at present practised, is done either it stoves enclosing pipes, through which pipes the blast is propelled in its transit from the blowing-engines to the tuyeres of the blast-furnaces, such pipes being in contact with hot air or gases, or else in stoves consisting of masses of material previously heated, which heat the blast in such transit is subsequently allowed to absorb; these latter are known as Cowper's stoves. Now, it is desirable that the blast should be heated to a very high temperature, and his improvement consists in causing the blast after it has left the heating stoves, and before it reaches the interior of the blast-furnaces, to receive an accession of heat from surfaces or masses of material heated to a higher temperature than that of the hot-blast as it leaves the stoves, and so superheating the said hot blast. The superheating apparatus may consist of pipes or masses like those used in ordinary stoves, and similarly arranged, but this will depend on conveniences of position, and other accidental circumstances. He is aware that attempts have been made to superheat the blast by direct contact with fuel, and he wishes it to be understood that in speaking of surfaces or masses "heated," he does not mean surfaces or masses of fuel, but of those which have been heated directly or indirectly by fuel. The plan of bringing the blast into direct contact with fuel is objectionable on account of the absorption of oxygen which it involves. In those cases where the superheating apparatus is erected in the form of a secondary stove, it may have one or more of its enclosing parts in common with the ordinary primary stove, but he prefers that this should not be so, as the higher temperature prevailing in the superheating apparatus makes it more liable to injury than the "stove" proper, wherefore it is desirable that the superheating apparatus should be capable of easy repair without interfering with the "stove." And in order that the "stove" may be available whilst the "superheating apparatus" is under repair, he prefers to provide a channel communicating directly from the stove to the furnace, which channel may be closed whilst the superheating apparatus is in use, but opened whilst it is out of use. There may be only one superheating apparatus to receive the blast from several stoves, but he prefers that this should not be so.

GOLD-WASHER AND SEPARATOR.—As an improvement upon both riffle-boxes and amalgamators Mr. Hicks, of New York, has patented a machine, which is designed, by the peculiar motion given to it, to settle the gold to the bottom of the separator, and, at the same time, prevent its becoming packed with ores. In nearly all mining districts there are more or less mining lands in which the gold is so fine and flat as to have received the term "float gold," very much of which it is impossible to save by the usual methods. The upper portion is a section of a common sluice, with the bottom perforated, through which the water, the smaller particles of gravel, &c., with the gold, pass; while the coarser matters pass off down the sluice. The matter that passes through the bottom of the sluice falls into a rectangular pan, having an opening in the centre, through which it passes upon the centre of the separator below; this separator is circular, and designed to be kept level by the shaft which passes through it. The upper end of the shaft runs in a bar, which can be moved in any direction, whereby the separator can be kept level, without disturbing the frame. The centre of the separator is depressed, forming a circular pan, into which the matter from the rectangular pan above mentioned falls; this peculiarity of the centre of the separator is designed to equalise the distribution of the dirt and the water to all points of the circumference. From the centre it is slightly declining. Next to the plane, outwardly, and forming the circumference of the separator, is a semicircular depression. By the action of the gearing attached to the frame the separator receives a combined reciprocal, horizontal, rotary, and shaking motion, which settles the gold in the outward depression, or pan. The idea is to settle the gold into the depression by the motion of the separator, while the sweep of the water from the centre of the separator to the circumference, combined with the tangential or centrifugal force given to lighter matter, results in the separation and retention of the gold in the outward depression, or pan. Where water is scarce the inventor proposes that the section of a sluice which will be provided may be closed up at each end, making a box, into which the dirt can be put and washed, as is usual with a rocker. The motion to be given to the box by the gearing in an obvious manner or by a lever; the box should move on four rollers, two attached to each side bar of the frame. Where no water can be had for mining purposes, the tangential or centrifugal force given to matter by the motion of the separator, coupled with the elevation of the centre of the separator, is of itself sufficient to separate the dirt from the gold, provided the dirt be thoroughly dried and pulverised. The amount of fall necessary to run one of these machines, with 20 feet of sluice to wash the dirt in attached, is but 20 inches, while it can be run with 10 inches of fall and the same amount of sluicing, by setting the machine 10 inches below the surface, though at the expense of fall for tailings.

*** With last week's Journal we gave a SUPPLEMENTARY SHEET, which contains—Rough Plan of the Devon Great Maria Mine; Description of the Metallurgical Processes of the Mansfield Copper Works, by Mr. A. Von Groddeck; Industrial Resources of the Tyne, Wear, and Tees; Chemistry in the Manufactory; Marine Engineering; Application of Cast and Wrought Iron to Building Purposes; How to obtain a Patent; Geological Magazine; Geological Nomenclature; the Law of Joint-Stock Companies; Preference Shares in Winding-up; Promoter-Liquidators; Old Wheal Neptune; Composition Deeds; Liability upon Guarantees; Schwartzkopff's Self Acting Spanner; Manufacture of Chlorine; Uniting Metallic Surfaces; Improvements in Puddling Furnaces; Improved Steam Valve; Adjustable Lever Wheel; Quicksilver—how to test it and detect adulteration; the Magnesium Light; Copper Ore Sales; Mineral Wealth of Denbigh and Flint, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. 16, 1864.

COPPER.	£	s.	d.	£	s.	d.
Best selected....p. ton	99	0	0	101	0	0
Tough cake..... „	96	0	0	98	0	0
Tile ..... „	96	0	0	98	0	0
Burra Burra .... „	101	0	0	—		
Copper wire .....p. lb.	0	1	1	—		
ditto tubes ..... „	0	1	1½	—		
Sheathing & bolts p. ton	101	0	0	102	0	0
Bottoms ..... „	112	0	0	—		
Old (Exchange)..... „	91	0	0	—		

IRON.	Per Ton.					
Bars Welsh, in London..	7	15	0	—		
Ditto, to arrive	7	15	0	—		
Nail rods	9	10	0	—		
„ Stafford. in London	9	10	0	—		
Bars ditto	9	10	0	—		
Hoops ditto	10	10	0	—		
Sheets, single	11	10	0	—		
Pig No. 1, in Wales....	4	10	0	—		
Refined metal, ditto....	4	0	0	5	0	0
Bars, common, ditto....	7	0	0	—		
Do., merch., Tyne or Tees	8	5	0	8	10	0
Ditto, railway, in Wales	7	0	0	7	10	0
Ditto, Swed. in London.	12	0	0	12	5	0
To arrive	12	5	0	—		
P. & No. 1, in Clyde....	2	18	3	3	2	6
Ditto, f.o.b. Tyne or Tees	2	16	0	2	18	0
Ditto, forge, f.o.b. ditto..	2	15	0	—		
Railway chairs.....	5	10	0	5	15	0
„ spikes.....	11	0	0	12	0	0

LEAD.						
English Pig, ordny. soft	20	5	0	20	10	0
Ditto (WB)	22	10	0	—		
Ditto sheet	21	15	0	—		
Ditto red lead	22	0	0	—		
Ditto white	26	0	0	26	5	0
Ditto patent shot.....	23	0	0	—		
Spanish	19	10	0	—		

BRASS.	Per. lb.
Sheets	11d.- —
Wire	10½d.- —
Tubes	11¾d.- —

FOREIGN STEEL.	Per Ton.					
Swedish, in kegs (rolled)	15	10	0	15	10	0
„ (hammered).	16	0	0	18	0	0
Ditto in faggots.....	17	0	0	18	0	0
English, Spring	19	0	0	23	0	0
Bessemer's, Engineers' Tool	44	0	0	—		
„ Spindle	30	0	0	—		
QUICKSILVER (per bottle).	8	0	0	nom.		

SPELTER.	Per Ton.					
Foreign	24	15	0	—		
To arrive	24	10	0	—		

ZINC.						
In sheets	28	0	0	—		

TIN.						
English, blocks 101	0	0	—			
Ditto, Bars (in barrels)..102	0	0	—			
Ditto, Refined 106	0	0	—			
Banca 100	0	0	—			
Straits	98	0	0	—		

TIN-PLATES.*						
IC Charcoal, 1st qua. p. box,	1	8	0	1	11	0
IX Ditto 1st quality „	1	14	0	1	17	0
IC Ditto 2d quality „	1	6	0	1	8	0
IX Ditto 2d quality „	1	12	0	1	14	0
IC Coke ..... „	1	3	0	1	5	0
IX Ditto..... „	1	9	0	1	11	0
Canada plates ....p. ton	13	10	0	—		

In London; 20*s.* less at the works.

YellowMetal Sheathing. p. lb.	8½d.- —
Sheets .....p. lb.	8d.- 8¼.
Indian Charcoal Pigs in London	7 0 0 - 7 10 0

* At the works, 1*s.* to 1*s.* 6*d.* per box less.

REMARKS.—Nothing material has occurred during the past week to alter the position of the Metal Market, nor have any circumstances arisen at all to improve its condition. The continued favourable accounts received from America, that the popular feeling seems to tend greatly in the direction of peace, and the hope that this will be the result of the coming Presidential election, even should nothing be done in this direction before that event, cause us to look forward with sanguine hopes to the future of the Metal Trade, which undoubtedly would receive a great revival should these anticipations be realised; and, indeed, we are disposed to think that this turn in American affairs may take place sooner than some persons expect; as it seems to be a part of the American character, that when they take up a position they cannot rest until that position is established. We sincerely hope that this may be proved to be correct in the present instance. The tightness of the money market is still acting prejudicially on the metal trade, causing buyers to operate in as small a way as possible; consumers only supplying their wants as they are compelled, and driving speculators altogether out of the marked; it also causes a general anxiety and want of confidence in all kinds of business.

COPPER.—The market remains much in the same position as last week; transactions are by no means numerous, and business can be done at about the same terms.

IRON.—In Staffordshire the orders for manufactured iron are not quite so plentiful, but still there is every reason to look for a good demand. The great feature of the trade at present is the strike of the colliers in the Dudley and Tipton district, which has lately received a strong impulse, and is being actively promoted. A conference between some of the masters and deputations from the men has produced no result, and the leaders of the strike are using every means to extend and perpetuate the resistance. The consequence is that many more men have left work, alleging fear of injury, and a resolution has been adopted at a meeting in the adjacent district to cease work there and in other places. Meantime, those on strike are severely suffering; for some weeks they have only received 2*s.* 6*d.* per week, and the last week nothing at all. Some ironworks are stopped for want of coal, and the extension of the strike must lead to others following the example. In Wales the ironworks are, as a rule, on full time, and there is now an ample supply of water for motive power at all the principal establishments. The demand for iron, is upon the whole, satisfactory, and makers continue to be well supplied with orders. American specifications are coming in but slowly as yet, but the enquiry from other foreign markets is good; quotations are maintained, and there are hardly any complaints of underselling. Swedish iron remains without alteration. The Scotch pig-iron market has remained during the week with but slight fluctuations, prices varying from 58*s.* 4½*d.* to 58*s.* 6*d.* cash, and 59*s.* 4½*d.* to 59*s.* 6*d.* three months. The last advices state that the market is rather firmer, and a fair business has been done in warrants at above prices. The market closed steady, buyers offering 58*s.* 4½*d.* cash, and 59*s.* 4½*d.* three months, but sellers demanding 58*s.* 6*d.* cash, and 59*s.* 6*d.* three months.

LEAD.—A moderate business is doing at 20*l.* 5*s.* for common English pig; 20*l.* 10*s.* for LB; and 22*l.* 10*s.* for WB.

TIN.—On the 16th inst. the smelters of English announced a fall of 3*l.* per ton, making present prices 101*l.* for blocks, 102*l.* for bars (in barrels), and 106*l.* for refined. The market for foreign has also declined, Banca having been sold at 100*l.* cash, and Straits offered at 98*l.*, but without finding buyers. The tendency of the market is decidedly downwards.

SPELTER.—The transactions in this metal during the week have been exceedingly small, but prices remain nominally the same.

STEEL.—No business doing.

TIN-PLATES show rather more enquiry, especially for coke plates.

QUICKSILVER remains without alteration.

GLASGOW, SEPT. 15.—The market has been stronger, and a good business was done at 58*s.* 6½*d.* cash, and 59*s.* 6*d.* three months open; closing buyers at these rates; sellers, 1½*d.* higher. No. 1, g.m.b., 58*s.* 3*d.*; No. 3, 57*s.* 3*d.*

MIDDLESBRO', SEPT. 15.—The advance in the rate of discount noticed in our last has had the effect of completely locking up all orders for our market, except the most pressing. The price remains steady—buyers not anxious to get into stock, and sellers not eager to quit at lower prices. To-day warrants are quoted at 52*s.* cash, and 53*s.* three months, sellers; buyers, 3*d.* per ton less. No. 1, g.m.b., 54*s.* 6*d.*; No. 3, g.m.b., 51*s.* 6*d.*

BIRMINGHAM, SEPT. 16.—Rylands' "Iron Trade Circular" reports the market well attended, and a good business done in coal pigs and puddled bars. Several enquiries for Welsh bars and home district iron, with some business done at better prices, and sellers firm. Prices continue steady, and stand at—Best pigs (hot-air), 3*l.* 15*s.* to 4*l.* 5*s.*; seconds, 3*l.* 10*s.* to 3*l.* 12*s.* 6*d.*; cinder pigs, 3*l.* to 3*l.* 5*s.*; hematites, 3*l.* 10*s.*; Forest of Dean, 3*l.* 15*s.* to 4*l.* 5*s.* 7*d.*; manufactured iron, marked bars, 8*l.* 10*s.*; hoops, 9*l.* 10*s.*; single sheets, 10*l.*; doubles, 11*l.* 10*s.*; latters, 13*l.*; angle iron, 8*l.* 15*s.* to 9*l.* 10*s.*; nail rods, 8*l.* 10*s.* to 9*l.*; plates, 10*l.* to 12*l.*, and other descriptions of iron in proportion at makers' works. Orders for coal have been sent from South Staffordshire to outlying coal districts, and arrangements made to ensure a sufficient supply for works against the strike.

COAL MARKET.—On Monday, the fresh ships that came forward only numbered 40; the supply of house coal was consequently insufficient for the trade, and a complete clearance was effected at a further rise of 6*d.* per ton. Hartley's and manufacturers' in steady request at previous quotations. Best house coal, 20*s.* to 20*s.* 6*d.*; seconds, 19*s.* to 19*s.* 6*d.*; Hartley's, 19*s.* 6*d.* to 20*s.*; manufacturers', 13*s.* 6*d.* to 16*s.* 6*d.*—On Wednesday

45 ships arrived. First-class house coal was in demand at 21s., being 6d. higher. In other kinds no alteration.—On Friday 21 ships arrived. The market continued steady at last prices for all descriptions of coal, and is entirely cleared. Hetton Wallsend, 21s.; East Hartlepool Wallsend, 20s. 6d.; Tees Wallsend, 20s. 6d.; Eden Main, 20s.; Harton Wallsend, 19s. 6d.; Hastings' Hartley, 20s.; Bute's Tanfield, 14s. Unsold *nil*; 65 ships at sea.

A fair average amount of business has been transacted in the MINING SHARE MARKET since our last, and the demand for a few prominent mines continues. On Thursday the settlement of the fortnightly account took place, and was rather unusually heavy for this time of the year, but it passed off well, and a considerable amount of speculative and other business has commenced for the next, in East Grenville, Wheal Crebor, East Lovell, Hallenbeagle, Carn Camborne, Prosper United, Wheal Grenville, North Treskerby, East Wheal Russell, Redmoor, Wheal Hope, Wheal Unity, East Carn Brea, and several other mines. East Grenville shares have kept pretty steady all the week, and leave off, in demand, at 7⅛ to 7¼; the lode in the shaft sinking below the 75 is 2 feet wide, with good stones of yellow ore; the 65 west is yielding good ore and tin, worth 15*l.* per fathom; the western stope yields 7 tons per fathom; the 55 west has now come into ore, worth 25*l.* per fathom. Wheal Grenville, 7¼ to 7⅜; the winze has been holed from the 80 to the 90, east of new shaft, and will open out good ground for stoping. East Caradon shares have been flatter, at 26 to 28; we understand the next dividend is likely to be 15s. per share, and before the meeting it is hoped the south lode will be cut in the 80 fm. level. Carn Camborne shares in good demand, and advanced to 33s., 35s. Clifford Amalgamated, 31 to 32. Wheal Crebor shares have been in good demand, and leave off 40s. to 42s. 6d.; the lode under the cross-course, in Cook's shaft, is of a very promising character, and a great improvement looked for; in the 96 west the lode looks like turning out a good quantity of ore, and, altogether, the mine is much improved. Cook's Kitchen, 14 to 16; East Basset, 67 to 69; East Carn Brea, 7¼ to 7⅛; East Russell, 4¼ to 4⅜; Great Laxey, 15 to 16; Great South Tolgus, 2⅛ to 2⅜; East Lovell shares rose to 10, and leave off 9¾ to 10¼; Great Wheal Vor shares have been in good demand, and leave off 32 to 33; Great Wheal Fortune, 7⅛ to 8⅛; Hallenbeagle, 3⅛ to 3⅜; Hingston Down, 4 to 4¼. Wheal Grylls, 9 to 10; the mine is said to be improving, and sold on Wednesday 11¼ tons of tin, for 660*l.*, which will about pay cost.

Grambler and St. Aubyn shares have improved, and leave off 8 to 10; the accounts at the meeting show a balance against the adventurers of 194*l.* 11s. 1d.; loss on two months, 399*l.* 9s. 3d., and a call of 1*l.* per share was made. The engine-shaft has been sunk to the 84, and driven 5 fms. east and 2 fms. west. The lode in the eastern end is 2½ ft. wide, worth 1 ton of copper ore per fm. The west end is worth ½ ton, and looking promising for further improvement. The prospects of the mine, altogether, are described as more cheering than for some time past, especially in the bottom part. The sett has been divided, and the eastern part, under the name of EAST WHEAL GRAMBLER, made into 486 shares, with a call of 10s. per share, and offered *pro rata* to the existing shareholders of Grambler. This may, probably, be a wise arrangement; at the same time, it comes upon the shareholders rather sudden and unexpectedly, while the old mine is making regular and heavy calls. The prospects of this eastern part are described as good, and a shaft will be commenced forthwith to take one of the lodes about 20 fms., and the other 30 or 40 fms., from surface. Marke Valley, 4½ to 4¾. New Rosewarne, 9 to 10; the lode at the shaft is valued at 50*l.* per fm. North Crofty, 3¾ to 4; North Treskerby, 3¼ to 3½; Prosper United, 3½ to 4; Providence Mines, 38 to 40; Rosewall Hill and Ransom, 2¾ to 3; South Caradon, 510 to 520; South Condurrow, 28s. to 30s. North Roskear, 22 to 24; at the meeting, held on Tuesday, the accounts showed a balance against the mine of 1783*l.* 8s. 6d., and a call of 2*l.* per share was made. In the western district, copper department, the 205, 194, 174, and 164 fm. levels, west of Doctor's shaft and Pearce's shaft, continue to open through a large lode, producing copper, but not sufficient to pay for stoping. In the tin department, the accumulation of tinstuff underground is valued at 3000*l.* to 4000*l.*; delays have occurred in the erection of calciners, and, in consequence, it will take two months before all will be complete in the various departments for returning the tin. Still in the coming two months the agents hope to sell 30 tons, and in the ensuing two months 50 tons. South Grenville, 10s. to 12s., and have been largely dealt in. Tincroft, 18 to 19; Vale of Towy, 6s. to 7s.; West Basset, 8½ to 8¾; West Caradon, 10 to 11; West Chiverton, 60 to 65; West Seton, 207½ to 212½; Wheal Basset, 90 to 92½. At Wheal Margery meeting the accounts showed a credit balance on four months to end of June of 87*l.* 6s. 8d., and a balance in favour of adventurers to that time of 29*l.* 0s. 4d. The copper ore sales on the 8th of September realised 1128*l.* 6s. 4d. The ore ground in the different levels and stopes is valued at 152*l.* per fm. in the aggregate, and the prospects of the mine are much improved. Wheal Chiverton, 7 to 7½; Wheal Mary Ann, 14½ to 15½, ex div. of 10s. per share. Wheal Seton, 210 to 215; Wheal Trelawny, 18½ to 19½; Wheal Unity, 4s. to 6s.; Grylls Wheal Florence, 2½ to 3½. Prince of Wales, 3s. 6d. to 5s. 6d., and a demand arising for the shares; the lode is now 8 feet wide, with good ore in it. Kelly Bray, 10s. to 11s.; in sinking a winze below the 25 fathom level a course of ore has been cut, worth 50*l.* per fathom; the east end of the winze is equally good. St. Day United, 30s. to 32s. 6d.; the lode in Oppie's shaft is worth 45*l.* per fathom; the 180 east is worth 12*l.* per fm.; the 174 west is worth 18*l.* per fm.; the 164 west is worth 12*l.* per fathom. At Wheal Kitty (St. Agnes) the 65 fathom level west is worth 22*l.* per fathom; other parts are valued at 63*l.* per fathom. Great Wheal Busy, 2 to 2½; the winze below the 130 fathom level east is worth 45*l.* per fathom; the west winze is worth 20*l.* per fathom; the 90 east is worth 35*l.* to 40*l.* per fathom.

On the Stock Exchange there has been only a moderate enquiry for Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—Clifford, 31; East Caradon, 27½, 27⅞; East Grenville, 7⅜, 7½, 7⅜, 7⅝; Great Wheal Vor, 28½, 31½; Tincroft, 18½; Wheal Basset, 89; East Lovell, 9¾, 10; East Basset, 68. In Colonial and Foreign Mining Shares the prices were:—Yudanamutana, 2½; Cape, 10½, 10; St. John del Rey, 35½, 36½; United Mexican, 5⅛, 5⅜, 5⅝, 5½; Linares, 5½; East del Rey, ⅜; Vallanzasca, 1½, 1⅝, 1½, 1⅝; Alamillos, ⅞; Don Pedro, ⅞, ½; Fortuna, 3½.

The progress during the past week of undertakings recently introduced, the publication of whose prospectuses has been already referred to, is thus reported:—The Mining Financial Association is progressing satisfactorily. The proposition, however, to accept shares in lieu of cash has given the executive almost interminable trouble; many difficulties as to the price to be allowed having offered the directors no other means of solution than returning the deposits, and declining further correspondence with the applicants. The consequence is that there are still some vacancies in the share list, which, however, are rapidly filling up. The directors advertise the first report from their manager, which will be found in another column, and it appears that he suggests bi-monthly meetings instead of half-yearly, the first to be held on Oct. 30. The executive appear thoroughly satisfied with the prospects of profits from the shares which have been accepted.—Devon Great Maria is attracting considerable attention; the proximity of the sett to Devon Great Consols, and the proof shown by the plan, published in last week's Journal, that the Devon Great Maria is traversed by the same lodes having caused a very large number of applications for shares to be sent in.—The Kilcrohane and Gurtnakilla Slate and Slab Company have given notice that no applications for shares will be received after Saturday next; it is understood that the subscriptions have been very numerous. The shares are quoted 1 to 1¼ prem. The United Kingdom Steam Boiler Insurance Company shares are quoted ¾ to 1¼ premium.

IRISH MINE SHARE MARKET.—The Stock and Share Market continues depressed in proportion as prices vary in London. The general dulness does not, however, appear to affect our mining shares. Those of the Mining Company of Ireland are not only in request at the last quotation of 27*l.* 7s. 6d. (7*l.* paid), but would be taken for forward delivery at an advance of 5s. Wicklow Copper shares also continue in good demand at the former rate of 14*l.* 10s. (2*l.* 10s. paid). Carysforts (25s. paid) are only nominally quoted at from 10s. to 15s. per share, and freely offered for sale. Killaloe Slates are also for sale, and so are Connorrees, at 19s. (20s. paid). The Connorreee Mining Company held a meeting in Dublin, on Saturday last (Mr. J. F. Waller, LL.D., in the chair). From the directors' report it appears that the ore bills for the past half-year exceeded the expenses, and that the mines are now yielding profits, with a fair prospect for the future. In addition to the ordinary produce of copper and sulphur (or iron pyrites) Captain Bishop discovered that an immense accumulation of waste stuff on the mines contains salts of copper, which he caused to be percolated into water, and carried into the common launders, which have for some years been in use there for the precipitation of copper from the mine water, which hitherto gave a percentage of about 30. By Capt. Bishop's judicious process this percentage has been raised to 50, and as the mass of waste is very large it is likely to prove a source of considerable profit for many years to come. The Chairman congratulated the shareholders, and complimented Capt. Bishop on the energy and great ability displayed by him in the management of the mines. Mr. M. Browne, the late owner of these mines, mentioned that he had made two inspections of the mines, and that he never was more gratified in his life than in perceiving the condition in which they were, and that nothing that could be said by any party would induce him to part with the large number of shares he held. He further said that Capt. Bishop had satisfied Capt. Josiah H. Hitchins, who recently made a thorough inspection and very favourable report of the mines, that there are yet 40 fathoms of backs unworked, and that the deeper the works go the more valuable would the ore become. It was also stated that the company's sett comprises about 1800 acres, the greater portion of which was unworked, and might be made very valuable.

In relation to the Shroughmore and Kilmacoo Mines, the northern and southern extremities of the sett, Capt. Hitchins says:—"The two mines in question should not be any longer overlooked, bearing in mind the fact that they have both yielded some hundreds of tons of sulphur. These lodes also show desirable mineralogical conditions, judging by their produce at the surface, which also bespeaks the fact that they are in the right rock, only requiring to be worked deeper to be found productive." This strong recommendation of the southern and northern limits of the very extensive Connorree sett is a further corroboration of the conclusion arrived at by all practical miners, who have had an opportunity of carefully inspecting any part of the Ovoca Mines, that the geologists who visited the districts before the several mines were as well developed as they now are, put a limit to the breadth, or north and south extent, of the productive mineral ground which is perfectly imaginary, and has for some time past been found to be as erroneous, though, thanks to the perseverence and judgment of practical miners, not as damaging as the assertion of the existence of red sandstone in the county Cork.

At the Swansea Ticketing, on Tuesday, 2067 tons of copper ore were sold, realising 30,686*l.* 18s. 6d. The particulars of the sale were—Average standard, 99*l.* 14s. 6d.; average produce, 17⅛; average price per ton, 14*l.* 17s.; quantity of fine copper, 354 tons. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Aug. 16	1670	£101 13 6	11 7-16	£ 9 7 0	16s. 4d.	£81 17 6
„ 30	1165	100 4 0	15¾	13 11 6	17 2	85 17 6
Sept. 13	2067	99 14 6	17⅛	14 17 0	17 4	86 14 0

Compared with the last sale, the advance has been in the standard about 14s., and in the price per ton of ore about 2s. Compared with the corresponding sale of last month, the advance has been in the standard about 4*l.* 10s., and in the price per ton of ore about 13s. 6d. Of the 2067 tons sold on Tuesday, 851 tons were British ores, which gave an average produce of 9¾, and sold at an average standard of 106*l.* 15s.=8*l.* 3s. per ton of ore; the remaining 1216 tons were foreign ores, which gave an average produce of 22⅜, and sold at an average standard of 98*l.* 6s. 6d.=19*l.* 11s. per ton of ore. There will be no sale on Sept. 27.

Sept. 2.—530	tons	regulus, to arrive, per "Capricorn"	0 17 9	„
„ 5.—407	„	regulus, at Swansea, per "Claudine"	0 17 9	„
„ 5.—193	„	regulus, at Swansea, per "Cobrero"	0 17 9	„
„ 5.—320	„	ore, at Swansea, per "Cobrero"	0 17 9	„
„ 7.—200	„	bars, at Swansea, "Governor" (nett, 2 months)	85 15 0	per ton.
„ 7.— 50	„	bars, at Swansea, "Governor" (usual terms)	87 0 0	„
„ 9.—600	„	ore, at Swansea, per "Emily Waters"	0 17 9	per unit.

Quotations are 17s. 9d. for ore and regulus, 85*l.* to 85*l.* 10s. for bars, and 18s. to 18s. 3d. for Barilla. Arrivals from the West Coast S.A. have been—

	Ores.	Regulus.	Bars.	Barilla.
"Duchess of Lancaster," at Coquimbo	—	317	260	—
"Aranco," Valparaiso	—	—	106	—
"Ocean King," Guayacan	—	133	475	—
"Pembroke Castle," Valparaiso	620	—	—	—
"Peruano," Arica	3	—	—	—
"Bolivar," Colon	—	—	3	5
"Mexican," Colon	—	—	—	120
"Tacna," Lota	—	—	99	—

Stocks of Chili in first and second hands, as nearly as they can be estimated, likely to be available on the market are—

Ores.	Regulus.	Bars.	Barilla.
1688	852	3832	120

In Swansea, the stocks in first and second hands are—

Ores.	Regulus.	Bars.	Barilla.
2740	980	1398	—

THE COPPER TRADE.—Mr. J. Pitcairn-Campbell, of Liverpool, reports—Since my last the Bank of England has raised its rate to 9 per cent., and the Copper Market has, of course, not escaped the very unfavourable effect upon trade generally attendant upon this measure, and the uncertainty as to the future course of money. Smelters continue very firm; but buyers limit their operations as much as possible. The West Coast advices continue to indicate that the shipments in the third quarter of the year will be very light; and but for the above causes the position of the market should be much more hopeful. Transactions since my last have been—

Aug. 31.—	21 tons bars, per "Bodrhyddan"	£87	0	0 per ton.
„ 31.—	33 „ Barilla, per "Christobal Colon"	0	18	3 per unit.
Sept. 2.—530	„ regulus, to arrive, per "Capricorn"	0	17	9 „
„ 5.—407	„ regulus, at Swansea, per "Claudine"	0	17	9 „
„ 5.—193	„ regulus, at Swansea, per "Cobrero"	0	17	9 „
„ 5.—320	„ ore, at Swansea, per "Cobrero"	0	17	9 „
„ 7.—200	„ bars, at Swansea, "Governor" (nett, 2 months)	85	15	0 per ton.
„ 7.— 50	„ bars, at Swansea, "Governor" (usual terms)	87	0	0 „
„ 9.—600	„ ore, at Swansea, per "Emily Waters"	0	17	9 per unit.

Quotations are 17s. 9d. for ore and regulus, 85*l.* to 85*l.* 10s. for bars, and 18s. to 18s. 3d. for Barilla. Arrivals from the West Coast S.A. have been—

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"Peruano," Arica	3	—	—	—
"Bolivar," Colon	—	—	3	5
"Mexican," Colon	—	—	—	120
"Tacna," Lota	—	—	99	—

Stocks of Chili in first and second hands, as nearly as they can be estimated, likely to be available on the market are—

Ores.	Regulus.	Bars.	Barilla.
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In Swansea, the stocks in first and second hands are—

Ores.	Regulus.	Bars.	Barilla.
2740	980	1398	—

THE SOMBRERETE SILVER MINES OF MEXICO.—We understand that Capt. William Paul, who had been sent out to inspect and report on these celebrated mines, has returned, and that his report is highly favourable. Capt. Paul states that the Sombrerete Mines are considered the richest in all Mexico, and that as soon as they are unwatered they may be expected to give greater results than either the Rio del Montes Silver Mines, which yield 360,000*l.* per annum of profits, or the Gould and Curry, which yield 300,000*l.* per annum. We hear that a company is in the course of formation for working these mines, and that the prospectus and report will make their appearance shortly. An additional supply of silver is much wanted, and as the Sombrerete Mines yielded as much as 1,000,000*l.* per annum when they were worked 40 years ago, and will, no doubt, do so again, this supply will be a great relief to commerce. The national importance of this undertaking, considering the present state of the money market, cannot be over estimated, and we understand the undertaking is in good hands, and that no time will be lost in bringing out the company in a manner to ensure public confidence. These mines are referred to by Humboldt and others, as follows:—"The mines of Sombrerete have become celebrated from the immense riches of the Veta Negra vein, which in the space of a few months yielded to the Marques del Aputado nett profit of more than twenty millions of livres."—*Humboldt*, p. 108. "The Veta Negra Vein of Sombrerete has yielded the greatest wealth of any seam of ore yet discovered in the two hemispheres."—*Modern Traveller*, 1825.

OTEA COPPER MINE.—A powerful engine and crusher have been shipped for this mine, and improved dressing machinery (all to be worked by the same engine) will soon follow. The mine has already yielded about 30,000*l.* worth of ore from a comparatively small space of ground, but this was done with the aid of the most inadequate machinery—we believe only an old 8-horse engine bought in the colony, which worked a most inefficient crusher. Not only will the machinery now sent out be much more powerful, but it will supersede a great deal of manual labour hitherto employed at the mine, and to such an extent will this affect the results, that we understand the dressing cost will be reduced from about 5*l.* per ton to about 15s. or 20s. per ton. Again, it is estimated that the new machinery will get out about 25 per cent. more ore from the same quality of stuff—that is, a great deal of ore hitherto left in the stone which was passed through the old crusher and thrown aside will in future be extracted, and increase the returns from the same quantity of stone raised. Capt. Holman estimates that above the adit alone there are 4000 tons of copper ore, of full 15 per cent. produce, still to take away, so that immediate and considerable returns are likely to be made soon after the new machinery is at work, and no doubt good profits be realised; the mine having the advantage of situation on the coast, and no land carriage, and also very low freights to England. Capt. Holman says that below adit a great deal of ore is also available, and that if the improvement in depth is only permanent, the future value of the mine would be very great.

LLANTWIT VARDRE COLLIERY COMPANY.—The newly-appointed directors, under the power given them by the resolutions passed at the last special meeting (details of which have already appeared in the Journal), have decided to offer to each shareholder one preference share for every two ordinary shares at present held, such preference shares to bear a perpetual preferential dividend of 10 per cent. It is mentioned that a report has been received from one of the most eminent engineers in South Wales—a gentleman wholly unconnected with those who have formerly reported upon the property, and who is not in any way connected with the colliery or the directors, and upon this report the directors rest their recommendation to the shareholders and the public. This report states "that the property contains the whole of the coal measures on the south crop of the South Wales mineral basin, which for years has been worked to advantage, and that there seems no reason why this colliery, with judicious working, should not yield a good percentage to the shareholders." During the last three months the colliery has been brought into such a working condition that 34 tons of coal can now be raised daily, which in another month can be increased to 50 tons, and this quantity can be further augmented till it reaches 100 or 200 tons daily; but there are no means of bringing the coal to the market until a railway of 1¼ mile be constructed, the cost of which will be about 3000*l.* In order to raise this sum, and to place the pecuniary affairs of the company on a satisfactory footing, the directors have decided upon adopting the course above mentioned.

GREAT WHEAL VOR.—The valuable lode found under the slide at Metal shaft is making down with all its richness below the slide at Ivey's shaft, showing that it is one continuous shoot of tin. The distance between the two shafts is 75 fathoms.

NEW BIRCH TOR AND VITIFER CONSOLS.—The position and prospects of this mine continue to improve as its development is extended. Notwithstanding the low price of tin, the mine is realising a monthly profit of between 200*l.* and 300*l.*; and when the improvements that are now being carried on for the more economic development of the property are completed, it may safely be assumed that the returns will be increased and the costs diminished.

GOLD SHIPS FROM AUSTRALIA.—The following are the "gold ships" reported by this mail:—Suffolk, for London, with 41,736 ozs.; J. E. H., for London, 10,919 ozs.; Northam (steam-ship), for England, 87,167 ozs. (with last mail): total, 139,822 ozs. The total shipments for the year (to July 23) had been 971,563 ozs., against 1,029,178 ozs. in the corresponding period of 1863.

Mr. Wm. Fawcett, of Salisbury, Chairman of the East Caradon Mining Company, has joined the board of the Chilian Mining and Trading Company.

Creditors of the Old Wheal Neptune Mining Company, now winding-up in the Stannaries Court, are required to send the particulars of their claims to the liquidators by the 24th inst.

A frightful accident took place a few days ago at Stockholm. An engineer, named Nobel, the inventor of submarine mines, had established in one of the suburbs of that city a manufactory of nitroglycerine, having discovered a process by which that fulminating composition could be used with great effect in mining operations. From some unexplained cause, an explosion took place in the manufactory, and the building, with some of the adjoining houses, were completely destroyed. Several persons were killed, and others dreadfully wounded. One of the sons of M. Nobel is among the former, his body having been found, at a considerable distance, horribly mutilated.

LEAD ORES.

Sold on the 8th September.

Mines.	Tons.	Price per ton.	Purchasers.
Wheal Frank Mills	90	£12 15 0	Stock & Co.
Sold on the 9th September.			
Cargoll	63	17 17 0	R. Michell & Son.
Sold on the 12th September.			
East Darren	75	17 1 6	Panther Co.
Cwm Erfin	25	16 17 6	ditto
ditto	37	17 10 6	ditto
Sold on the 14th September.			
Minera Boundary, &c. (blue ore)	30	13 14 0	Brymbo Co.
Sold on the 15th September.			
Roman Gravels	15	14 4 6	Walker, Parker, & Co.
Dyfngwm	12	13 13 6	ditto

BLACK TIN.

Sold during the last four weeks.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Basset & Grylls	20 4 0 9	—	£1201 13 6	—

COPPER ORES.

Sampled August 24, and sold at Swansea September 13.

Mines.	Tons.	Produce.	Price.
Berehaven	80	11	£9 5 6
ditto	70	11¼	9 9 0
ditto	121	11½	9 7 0
ditto	121	10	8 8 6
ditto	108	10⅝	8 16 6
ditto	87	9⅝	8 3 0
Cape Cop. Co.	63	31⅛	26 18 0
ditto	62	31⅜	26 14 0
ditto	59	31⅜	27 2 0
ditto	58	32⅛	27 9 0
ditto	55	31⅛	27 10 6
ditto	45	31⅛	27 4 0
ditto	51	26⅛	23 6 0
ditto	46	26⅛	23 0 0
ditto	70	30¼	26 11 6
ditto	1	52⅛	45 1 0
Cuba	105	14⅛	12 1 0
Cuba	104	14⅝	£12 1 0
ditto	16	71⅛	59 8 6
ditto	100	14⅜	12 7 0
ditto	97	14⅜	12 7 6
ditto	80	14½	12 2 0
ditto	20	22½	19 1 0
Precipitate	14	71	60 0 0
(Mantua)	64	7⅜	5 12 0
ditto	43	20⅜	17 4 0
Burnt ore	138	2⅝	2 1 0
Copper ore	44	13½	11 13 0
British Reg.	25	23⅝	19 15 6
Lisbon ore	63	21⅛	18 0 6
London ore	1	53	47 4 0
ditto	1	6⅜	5 3 6
Cappagh	45	6¼	5 1 6
ditto	10	16⅛	14 2 0

TOTAL PRODUCE.

Berehaven	587	£5216	8 6	British Regulus	25	£ 494 7 6
Cape Copper	510	13430	11 6	Lisbon ore	63	1135 11 6
Cuba	643	9191	12 6	London ore	2	52 7 6
Burnt ore	138	282	18 0	Cappagh	55	369 7 6
Copper ore	44	513	14 0			

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Freeman and Co.	100	£1235 0 0
Grenfell and Sons	392	4925 7 0
Sims, Willyams, and Co.	124	3294 3 6
Vivian and Sons	492½	9462 7 0
Williams, Foster, and Co.	486½	6454 13 6
Bankart and Sons	86	1673 11 0
Sweetland, Tuttle, and Co.	208	1728 9 6
Penclawdd Copper Co.	70	1860 5 0
Mona Copper Co.	108	953 2 0
Total	2067	£30,686 18 6

NO SALE Sept. 27.

AVERAGES.

	Produce.	Price.	Standard.
British	9¾	£ 8 3 0	£106 15 0
Foreign	22⅜	19 11 0	98 6 6
Sale	17⅛	£14 17 0	£ 99 14 6

Totals—British, 851; Foreign, 1216=2067 tons (21 cwts.)

AVERAGES OF LAST SALE.

	Produce.	Price.	Standard.
British	11 15-16	£10 5 0	£104 2 6
Foreign	16⅞	14 11 0	99 4 6
Sale	15¾	£13 11 6	£160 4 0

Totals—British, 280; Foreign, 885=1165 tons (21 cwts.)

COPPER ORES.

NO SALE on Thursday last, September 15, 1864.

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and parcels.—Devon Great Consols 2078—East Caradon 502—Hingston Down 460—New Wheal Martha 455—Marke Valley 434—Bedford United 189—East Wheal Russell 128—Wheal Friendship 127—Wheal Emma 102—Fursdon 30.—Total, 4506 tons.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and parcels.—Wheal Rose 515—South Caradon 511—Clifford Amalgamated 500—Phœnix Mines 419—North Treskerby 358—Great Wheal Busy 300—West Caradon 258—Fowey Consols 213—St. Day United 148—Wheal Polmear 140—Boscawen 114—Gonamena 80 North Downs 77—South Crinnis 24—Buckingham's Ore 16—East Caradon 8.—Total, 3663 tons.

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

WHEAL HOPE.—Holding upwards of 150 shares in this mine, at a cost of more than 6*l*. per share, and having constantly increased our interest instead of diminishing it—relying upon the reports given us—no one can have been more disappointed and annoyed at the result of the last meeting than ourselves, especially as at the previous meeting, in June, the agent's report stated—"Now that the erection of the new whim and crusher is completed, we shall be able to set several pitches, and as we shall have the ground from the 65 to the 75 laid open in about a month, we expect a considerable increase in future samplings;" and, as 40 tons had then been sampled, we fully expected profits for the future. The reasons given us at the meeting for the falling off were—men could not be got to work the pitches, and the lode when cut in the 85 fm. level was disordered first by a flookan and then an elvan; and, as at the meeting we determined to have the mine inspected by an independent agent, and act according to his suggestions, we deferred any remarks of our own till we got his report. We believe the majority of the mine is held by ourselves and friends; we have always looked upon it as the best speculation in the Chiverton district, and so far from selling our shares, shall buy more if the price is tempting. Many mines we could mention were a few months ago more before the public, and selling at more than three times the price, and are now less even than Hope; and up to this time, in the latter mine, Mr. Reynolds, the manager, has carried on shares, upon which the calls have been considerably more, if not more than double, his pay as agent, and this added to our confidence in the mine; though there is no doubt that he has been far too sanguine as to *immediate* results. The agent sent to inspect the mine, in accordance with the resolution passed at the meeting, was Capt. Nancarrow, of West Chiverton, and his report, by the time this appears in print, will be in the hands of all the shareholders. It will be seen there are several *important points* in operation, that may *soon* lead to good results. He says the stratum of the sett is killas, traversed by large elvan courses, about which the adjoining mine was very rich. Parallel with the engine lode are two other lodes, seen of a very promising character in the 14 and 28 fm. levels, and cross-cuts are being driven to cut these lodes 65 fms. deep—*two good points*. On the south lode 500*l*. worth of lead ore was broken at a shallow level, and the bottom levels are getting under that part. The main lode, however, is the engine lode, upon which the shaft has been sunk to the 85, which has been driven 4 fms. east and 5 fms. west, with a very promising appearance. This we look upon as the *greatest* point of the mine, and Capt. Nancarrow says "the lode throughout the 85 has a good appearance, and is likely to improve, as the ground about it is congenial for lead." The ground in the cross-cut south, in the 75, is also, he says, "highly congenial for lead, *strongly indicating that a valuable lode* will be laid open there." The junction of the south lode and smelting-house lode in the 28, and the junction of the south and engine lodes in the 48, are both, he says, "points of interest and importance." Capt. Nancarrow recommends carrying out the works to prove all these points; and, in doing it, with the present state of the mine, 9 tons of lead per month may be returned (more could be had with an increase of tributers); and as discoveries may be daily looked for in the 75 and 85, much greater returns, we hope, may be made. On the whole, this report satisfies us that, although disappointed in the early results we were led to expect, we have a speculation in Wheal Hope second to none in the market at the price.

LEAWOOD MINE.—We have had a good many enquiries respecting this mine, and we may state that, so favourable was the opinion entertained of it, when a company was formed to work it about fourteen years ago, that shares were largely purchased at the rate of 10,000*l*. prem. for the mine; and Mr. Josiah Hitchins (the promoter of the Devon Great Consols) gave the lord a considerable sum for the chance of half the dues. An attempt was made to work the mine by water-power, which proved insufficient, and a small engine being then erected, it also was inadequate to control the underground water, and, of course, prevented the operations being carried on. The concern was then abandoned, owing to these two disappointments as to the machinery, the dulness in mining, and the inability of some of the largest shareholders to pay further heavy calls to put up proper machinery. A productive lode was, however, discovered, and the backs of the lodes are stated to be unusually fine. One of the first and most eminent practical authorities we have states, "It is my firm belief that there is an abundance of lead ore in connection with the splendid indications presented at the surface. As far as my judgment goes I do not believe that anything more encouraging can possibly be seen;" and he considers that the erection of a powerful engine is "a very trifling consideration in connection with such prospects as are held out by this strong, promising, masterly lode." Another well-known agent says, "A better looking lode on the back I never saw," and he does not think it could fail "to produce large quantities of lead ores." His opinion is "It is a first-rate speculation." The new 60-in. engine is being erected, and will probably be at work in a month or six weeks, and soon after that the water will be out of the shaft, which is already sunk 35 or 40 fms. under the adit, so that little time will elapse before they are driving on the lodes at a good depth. The pitch on the lead lode, in the shallow adit, is still productive, and is a very favourable feature for the deeper levels. We think it very likely that the mine will attract much attention in the next six months. We stated last week that the present company was formed in only 24 shares, and that this number would likely be multiplied, probably soon after the mine is drained. It will rest entirely with the shareholders what number they will be increased to, but we would suggest 3000, which would give 125 for each 1-24th. We wish also to add, that we have no personal interest in the mine, but have received the information we publish from a reliable source.

PRINCE OF WALES.—A letter has been shown to us from an agent who has been to this mine, which says there is good ore coming from the shaft, and it looks like the top of a bunch, just as they had it in the 20 at Wheal Arthur, when shares rose from 30s. o 40*l*. each. The mine is in the same district, surrounded by Drake Walls, Hingston Down, &c.; and we should advise the shareholders not to sell for the present.

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MINING FINANCIAL ASSOCIATION (LIMITED).—

This Association SOLICITS ALL BUSINESS CONNECTED with MINING and MINING SHARES.

The LIST of APPLICANTS for SHARES in this Association is ABOUT TO BE CLOSED, when NO FURTHER SHARES will be ISSUED at PAR.

All arrangements respecting taking shares in mines at work (instead of cash) for payment on allotment of shares, can be made on application.

EDWARD JAMES GIBBS, Manager.

Offices, 32, Walbrook, London, E.C., September 9, 1864.

MINING FINANCIAL ASSOCIATION (LIMITED).—

GENTLEMEN: In bringing before you my first report, I must say I do so with much pleasure, for the future seems dawning with bright promise before us, and already our offers of lucrative business augur well for continuous income and satisfactory dividends. Since I have been installed manager I have in no single case proposed to take shares in any mine whatever above the fair market price. This plan has greatly disappointed many large Cornish holders, who thought to saddle upon us a large quantity of nearly worthless stock, which would have been a very heavy burthen on our way to success. To the legitimate shareholder, who comes into our association to obtain the high percentage mining when properly undertaken affords, this plan must be a strong recommendation. By seeking the first and best information respecting improvements or falling off in any mine we shall, I am certain, be enabled to nett considerable profits.

The correspondence of the week that has been of any importance is now brought before you. I trust my replies may meet with your approval. I have thought it best in every case of considerable business to have a personal inspection of the property in which we are likely to be interested. This we have found necessary to ask for at the cost of the party applying.

You are most of you aware that many mines have been brought to us to bring before the public; the merits of some of these are now under inspection, and nothing shall be undertaken by ourselves, or offered to the public through us, that does not hold forth more than a very fair promise of success. Besides the usual terms of financial associations on such transactions, we stipulate to provide the secretaryship of the mine, at a fair fixed charge. We shall thus intimately connect ourselves with everything we introduce, from its promise as a child to its productiveness as a parent. In all cases where it is practicable, we shall offer advantages to our own shareholders in the obtaining shares above strangers to our association.

Among progressive mines from which during the next year we are likely to realise very largely, I will mention to you the great merits of North Devon, South Darren, and Okel Tor. The first of these is a limited liability company, worked in an economical way, now, after a time of anxiety to the first shareholders, making a monthly profit. About the end of next month will be a very anxious time for holders in these shares, for the first of the rich caunters discovered in the 10 fm. fm. level will be seen in one, at least, of the deeper levels. When first cut in the 10 it was worth £140 per fathom. Should it be cut as rich in the 20 or 30 fm. level, I should be unwilling to advise parting with our shares under £4 per share. Dividends will next year be commenced, as the middle lode pays the working expenses of the mine. Respecting the Vale of Girt, I will speak in my next week's report.

South Darren, again, is a mine destined next year to do very well. This mine adjoins Cwm Erfin and East Darren, two regular dividend mines. The 30 fm. level in South Darren has passed through ore ground for 45 fms. long, and worth in some places £45 per fm. The 40 is coming up under the end in this level, and is worth now in the end about £35 per fm. The 50 is coming up under this rich and well-lasting ground, and already a branch of ore is to be seen on the south wall. The 60 and 70 are also being driven to come up under the productive ground. Thus the mine is being vigorously developed, and I think the shareholders will next year be amply rewarded for their patience and outlay. It is a limited liability mine, in 6000 shares, and I should consider the shares worth now £2 each. If we could only remove South Darren into Cornwall, and put it into one out of several favourite districts I could name, the mine and its prospects would be called cheap at £40,000 or £50,000, though it is now selling at less than £12,000; but the Darren district is nearly, if not quite, as old as the more favoured districts of the south-west. I have Capt. Henry James's report of the mine before me, and it confirms in the main, with the caution of one of our best agents, what I have said of the mine.

Okel Tor, also, is a mine now paying cost, and opening out valuable reserves, which will shortly be available, when, with careful management, a dividend may be expected. This mine is selling for under £20,000, and its prospects justify a much higher price. The agent of the Duchy Office reckons that, when the ground is fairly laid open, about 100 tons per month more than the present returns can be brought into the tickettings.

In my next report I may probably refer to the most promising among our dividend mines; and I should state that I do not mention every progressive mine in which we are interested; some of them you can see in the daily price list. I mention those only from which, although not at this moment much spoken of in the market, great results may be expected, and none can say but that our risk is very slight, and our prospects of success great. I am very pleased that my proposal, in the good old miner-like style of bimonthly meetings of our shareholders, has met with your approval. I shall struggle hard till our first day, Oct. 30, to show up to that date an exceedingly satisfactory balance-sheet, and I hope our shares, at £2½ now, will then be of much greater value.

I have the honour to be, Gentlemen,
Your obedient servant, EDWARD JAMES GIBBS.

Offices, No. 32, Walbrook, London, E.C., September 14, 1864.

THE DEVON GREAT MARIA CONSOLIDATED MINING COMPANY (LIMITED).

Capital £50,000, divided into 2000 shares of £25 each.
Deposit, £2 10s. per share upon application, and £2 10s. per share upon allotment.

DIRECTORS.

CHARLES JOSEPH CARTTAR, Esq. (Coroner for Kent), Catherine House, Blackheath, S.E. (S.W.
JOHN JOHNSTONE, Esq., J.P., Friarstown House, Leitrim, and 31, Belgrave-road,
JOSEPH TILSTON, Esq., Chepstow-place, Bayswater, W.
And two members of the board to be elected from the body of shareholders at the first general meeting.

BANKERS—The Metropolitan and Provincial Bank (Limited), 75, Cornhill.
SOLICITOR—Frederick W. Snell, 1, George-street, Mansion-house, E.C.
AUDITORS—Sydney G. Smith, Esq., public accountant, 19, Coleman-street, E.C.
And one member to be elected from and by the body of shareholders.
ENGINEER—Mr. William H. Gray, St. Austell, Cornwall.
LOCAL MANAGER AND PURSER—Capt. Richards.
SECRETARY—Mr. Thomas Spargo.

OFFICES.

NOS. 224 AND 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON.

PROSPECTUS.

This company has been formed for the purpose of working an extensive mineral property, situated immediately to the west of the celebrated Devon Great Consols, which, upon an outlay of £1024, has paid in dividends £945,152, the present value of that property being £588,800.

The geological position of the two mines is identical, and the same lodes pass through the entire length of the sett; it is, therefore, reasonably expected that equally favourable results will be realised.

The total outlay required to bring the mine into a profitable state of working has been carefully investigated, and cannot exceed £10,000.

The directors have the utmost confidence in recommending this investment to their friends and the public. It has elements of success equal, perhaps superior, to any mining enterprise, undertaken since the issue of shares in the Devon Great Consols adjoining.

The directors have already received applications for a considerable number of shares, and the allotment letters will be issued in order of date of application.

Applications for shares to be accompanied by a deposit of £2 10s. per share, and £2 10s. per share will have to be paid on allotment.

The directors do not bind themselves to call up more than £10 per share, and shareholders will have the option of pre-payment only to this amount, upon which interest at 6 per cent. will be paid.

The operations at the mine are being carried on with all possible dispatch, under the able superintendence of Capt. Richards, whose report is annexed.

The company will be incorporated under the Companies Act, which limits the liability of shareholders to the amount of their respective subscriptions.

Applications for the remaining shares may be made in the usual form, addressed to the secretary, directors, or bankers.

The report from Captain Joseph Richards, mineral agent for the Right Hon. Earl Fortescue, justifies the expectations of the directors. The captain's practical knowledge of the underground workings of the Devon Great Consols, and long acquaintance with the run of lodes and their connection with this property, constitute him an indisputable authority.

I beg to hand you my report of this mine. It is situated directly east of New Wheal Martha, and west of the Devon Great Consols, and is in a direct line with the main lode of these mines, so that it may be considered as occupying a first-rate position. The great lode of New Wheal Martha and the main lode of Devon Great Consols run directly through the sett, as do also other lodes of very great promise. Two shafts are sunk, and levels driven. I feel assured that the prospects are such as to guarantee large returns of copper ore, and am, therefore, justified in recommending the Great Devon Maria as a very superior property. In addition to the very fine appearance of the lodes themselves, there are cross-courses and intersections, on which are often found the most splendid and valuable courses of ore. Any investors with whom my counsel has weight should promptly secure an interest, for, in my belief, the prospects of this mine are not exceeded by those of any other mine in the two counties.

JOSEPH RICHARDS, St. John's, Lamerton.

New Wheal Martha, Aug. 28, 1864.—Agreeably with your request, I beg to hand you my report of this mine. Its situation is between the New Wheal Martha and the Devon Great Consols. The masterly lodes of Great Wheal Martha, which are making such large returns, pass through the entire length of this sett, in a direct line with the run of the Devon Great Consols lodes. The strata in which these promising lodes are embedded are most congenial for the formation of metal, and are traversed by the cross-courses that have exercised so beneficial an influence as to their metal-bearing qualities in other mines in the neighbourhood. There is a large amount of labour done towards accomplishing a trial of this mine, and I have no doubt but that it will prove a most profitable undertaking to those who may become interested in it.

HENRY RICKARD.

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MR. HOPTON'S NEW WORK, entitled CONVERSATIONS ON MINES, &c., BETWEEN "A FATHER AND SON." Thirteen plans on ventilation and working out coal, dialling, planning, and taking the dip and rise of the mine illustrated.

Near 900 copies are ordered in Wigan alone.

Address Mr. J. J. CAMPBELL, Cropper's-hill, St. Helen's; or the author, 73, Peter-street, St. Helen's.

THE UNITED KINGDOM STEAM BOILER INSURANCE COMPANY (LIMITED).

Capital £100,000, in 20,000 shares of £5 each.
Registered under the Companies Acts.
First issue, 5000 shares.
Deposit on application, £1; and £1 upon allotment.

DIRECTORS.

JAMES BANCKS, Esq., Broxbourne (Director of the Peninsular and West Indian Banking Company).
FRANCIS BRODIGAN, Esq., J.P., 104, Pall Mall, and Pilton House, Meath.
ALFRED BRYANT, Esq., Catherine-court, Tower-hill (Director of the Wallachian Petroleum Company).
JOHN DOWNES, Esq. (of Messrs. Downes and Scott), 135, Upper Thames-street.
D'ARCY IRVINE, Esq., 3, Charles-street, St. James's-street (Director of the Tamar Railway Company).
ROBERT F. POWER, Esq., 105, Pall Mall.
L. A. RITTERBANDT, Esq., M.D., Manchester-street, Manchester-square.
PETER RYLANDS, Esq., J.P., Bewsay House, Warrington (Chairman of the Warrington Wire Iron Company).
AUGUSTO SOARES, Esq. (of Messrs. M. and A. Soares), 40, Seething-lane.

BANKERS—Alliance Bank (Limited), 5, Lothbury, London.
BROKER—G. B. Rickard, Esq., 24, Austinfriars.
CONSULTING ENGINEER—William Pole, Esq., F.R.S., Mem. Inst. C.E., 3, Storey's-gate, Westminster.
SOLICITOR—Henry Fryer, Esq., Gray's Inn, W.C.
SECRETARY (pro tem.)—Mr. G. Wilks.
TEMPORARY OFFICES,—16, LUDGATE STREET.

ABRIDGED PROSPECTUS.

This company has been established to provide against the risk and damage to property caused from the explosion of steam boilers, the sole business of this class being confined to one or two local companies, whose transactions, although of a most limited character, have proved highly profitable to the shareholders.

The Steam Boiler Insurance Company of Manchester was established in 1859, and made the first complete annual return in 1860, when the yearly revenue of the company exceeded the total paid-up capital, and left a balance of nett profit (after payment of all expenses) equal to more than 20 per cent. In 1862, the nett annual profits were equal to more than 35 per cent. on the paid-up capital; and in February, 1864, a dividend was declared for the current year equivalent to 45 per cent.

In case no allotment is made all deposits will be returned in full.

Full prospectuses, with forms of application for shares, can be obtained from the bankers, broker, or secretary, at the offices of the company.

THE PANT DU AND WAENLAS MINING COMPANY (LIMITED).

Incorporated under the Companies Act of 1862, whereby the liability of each shareholder is limited to the amount of his shares.
Capital £30,000, in 6000 shares of £5 each.
Deposit on application, £1 per share; and £1 on allotment. An interval of not less than six months between each call.

DIRECTORS.

THOMAS BARNES, Esq., M.P., The Quinta, near Chirk—CHAIRMAN.
THOMAS PAINTER, Esq., Grove Park, Wrexham.
JOHN THOMAS DAWES, Esq., Smethwick Hall, Smethwick, Staffordshire.
CHARLES HUGHES, Esq., Wrexham.
ISAAC SHONE, Esq., Grove Park, Wrexham.
(With power to add to their number.)

MANAGER—Mr. Thomas Williams, Coedpoeth, near Wrexham.
BANKERS—The National Provincial Bank of England, Wrexham.
SOLICITOR AND SECRETARY—C. Hicks, Esq., Shrewsbury.
REGISTERED OFFICE.
MARKET CHAMBERS, MARKET SQUARE, SHREWSBURY.

ABRIDGED PROSPECTUS.

This company is formed for the purpose of acquiring and working the celebrated Pant Du and Waenlas Lead Mines, in the parishes of Llanferras and Llanarmon, in the county of Denbigh, held under lease from the Marquis of Westminster, at the moderate dues of £1 per ton.

These two mines, which until recently have been held under separate leases, and worked by different proprietors, will now be united in one lease (newly granted for the term of 21 years) and carried on under one management, the effect of which will be very greatly to facilitate the development of both properties. A large tract of unworked orey ground, containing 70 acres, has also been added to Pant Du, which will very considerably augment the value of the sett.

By reference to the map of the Government Geological Survey for this district, it will appear that these mines are situated in the carboniferous limestone, resting on the clay-slate. The sett as a whole is very extensive, and estimated to contain about 500 acres, being in the heart of one of the richest lead districts in the kingdom, and lying between some of its most profitable mines—viz., the Maesysafn on the north, and the Westminster and Belgrave Mines on the south, all of which have been greatly productive, and have yielded many hundreds of thousands of pounds to their fortunate owners, Maesysafn Mine alone having yielded upwards of 15,000 tons of lead ore during the few years it was worked by its late proprietors, the Messrs. Lewis.

These mines have been inspected by Capt. Absalom Francis, of the Holway Mines, Flintshire, Walter Eddy, Esq., of Ruabon, Capt. Wm. Clemence, of the Westminster Mines, Capt. John Pryor, of Glan Alyn Mines, near Mold, and other eminent mining engineers, who unanimously agree as to their great value, and recommend that operations be carried on with vigour.

Applications for shares, accompanied with deposit (which will be returned to the applicant in the event of no allotment), may be made to the bankers, or to the secretary, at the offices of the company, where prospectuses and forms of application for shares may be obtained, and specimens of the ore, the original reports, and plans and sections of the mines, may be inspected.

THE PANT DU AND WAENLAS MINING COMPANY (LIMITED).—

Notice is hereby given that the LIST OF APPLICATIONS for SHARES in this Company will be CLOSED on TUESDAY, the 27th of September inst.

By order of the Board of Directors. C. HICKS, Sec.

Registered Offices, Market-square, Shrewsbury, Sept. 14, 1864.

THE ISLE OF MAN SLATE QUARRY AND GOLD MINING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, which limits the liability of each shareholder to the amount of his shares.
Capital £160,000, in 160,000 shares of £1 each.
Deposit on application 2s. 6d. per share, and 2s. 6d. on allotment.
No call to exceed 2s. 6d. per share, and an interval of not less than six months between each call.
A less number than 100 shares will not be allotted.

DIRECTORS.

Capt. R. J. MARSH, R.N., Cottage Mona, Ramsey—CHAIRMAN.
Capt. EWEN CAMERON, Glenfaba House, Peel.
SAMUEL BROADBENT, Esq., Bibaloe, Onchan, near Douglas.
JOSEPH HIGGINS, Esq., Peveril-terrace, Peel.
LESLIE LOCKHART, Esq., H.M. Customs, Peel.
Capt. G. RUSSEL, 103, Albany-street, Regent's-park, London.
JOHN MORGAN, Esq., Wainham Lodge, Shrewsbury.
(With power to add to their number.)

MANAGING DIRECTOR—Henry Johnson, Esq., Norfolk House, St. John's, Isle of Man.
BANKERS—The North and South Wales Bank, Liverpool.
" The National Provincial Bank of England, Shrewsbury.
SOLICITOR AND SECRETARY—C. Hicks, Esq., Shrewsbury.
REGISTERED OFFICE,—MARKET CHAMBERS, SHREWSBURY.

ABRIDGED PROSPECTUS.

This company has been established for the purpose of acquiring and working a most extensive and valuable mineral property, called the Glenrushen and Dalby Slate and Slab Quarries, situate in the parish of Patrick, in the southern district of the Isle of Man.

The property on which the quarries are opened consists of 6906 acres, nearly the whole of which is proved to be composed of slate rock, equal in quality to any produced from the best quarries in Wales.

This immense property, which it is believed is the largest slate sett in the kingdom, and likely to become one of the most valuable, is held under a lease from the Crown for the term of 21 years, at a reduced royalty of 1-16th, of which term 19½ years are unexpired.

A large sum of money has been spent in opening out and proving the value of their property, not only at the principal quarries at Glenrushen, but also on about 20 different parts of the sett, and "these trials have proved" (as stated in the report of Capt. John Francis, of Penrhyn, North Wales, under whose direction and advice these trials were made) "that almost the whole grant of 7000 acres is composed of slate-rock, and capable of having from eight to ten different quarries opened upon it."

The machinery and plant are very valuable, consisting of water-wheels, sawing mills and cutting machines, tramways, dressing sheds, offices, smiths and carpenters' shops, machine house, and other buildings; and there are several cottages erected, with a dining room and other conveniences for the accommodation of the quarrymen.

The sett has been inspected by Capt. John Francis, as before stated, and by Mr. W. R. Williams, of Dolgelly, mining engineer, Capts. Thomas and Robert Williams, of Coedporth, Denbighshire, and several other practical men, all of whom speak thereof in the highest terms.

The colour of the slate is a fine dark blue, the grain close and compact, the texture good, the lamination fine and silky, and the cleavage very good and straight.

There is also a very promising vein of green slate, which Capt. Francis recommends should be proved by driving a level into the rock, and if it turn out as well as anticipated will prove a very good green quarry.

In addition to the slate there are several veins or reefs of auriferous quartz traversing a portion of the sett, near to the Foxdale district, which it is believed will prove a valuable acquisition to the company. Portions of the quartz have been assayed by Messrs. Johnson and Sons, of London, Mr. Samuelson, of Liverpool, and other public assayers, with results varying from 1 oz. 2 dwts. 20 grs. to 5 dwts. of fine gold to the ton of quartz, and from the report of Mr. W. R. Williams there is every reason to expect most profitable results.

The quarries are about three miles from the shipping port of Peel, but when the projected railway from Douglas to Peel is completed they will be within a mile and a half of the intended station at Kirkpatrick, to connect them with which a loop-line will doubtless soon be formed.

Only £30,000 of the capital remains to be allotted.

Specimens of the slate may be seen, and prospectuses and forms of application for shares obtained at the offices of Messrs. LITTLEDALE, RIDLEY, and BARDSWELL, solicitors, Brown's-buildings, Liverpool; or at the registered office, where the original reports and map of the quarries may be inspected.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Isle of Man Slate Quarry and Gold Mining Company (Limited).

GENTLEMEN,—Having paid to your bankers the sum of £ , I hereby request that you will allot me shares in the Isle of Man Slate Quarry and Gold Mining Company (Limited), and I hereby agree to accept such shares, or any smaller number that may be allotted to me; to pay the deposit, allotment, and calls thereon, and to become a member of the company; and I authorise you to place my name on the register of members for the shares which may be allotted to me.

I am, Gentlemen,
Name in full.....
Address in full.....
Profession or business (if any).....
Date ..... Place of business (if any) .....

Notices to Correspondents.

ATMOSPHERAULIC STEAM-ENGINE.—A machine thus designated has been provisionally specified by Dr. Mountain, of St. Heliers, Jersey, who erroneously supposes that it will obtain additional power by employing two pistons and cylinders instead of one, one of the said pistons being used to drive the other. In his working cylinder he uses steam upon the usual high-pressure system, but the piston-rod is continued into the second, or obstructive, cylinder, which is open at the outer end. The inventor supposes that in the fore-stroke the working piston will produce a vacuum behind the obstructive piston, and that the pressure of the atmosphere or water on the outer side will give him more power than he lost in creating the vaccum. The maxim, *Ne sutor ultra crepidam*, is as worthy the adoption of a doctor of civil law as of other persons, and it is to be regretted that its teaching was not sufficient to prevent the payment of patent-office fees for the atmosphydraulic steam-engine, and it reflects great discredit upon the examiners of the University who permitted a student with so small a knowledge of the first principles of mechanics to rise above the position of an undergraduate—very much under.—G. J. B.: *Jersey*.

CREASE'S BORING MACHINE.—I am informed that one of these machines has been working for some time at East Gunnis Lake Mine underground. I shall be glad, as a miner, to know what the result has been, what price ground has been bored, if by manual labour, cost of same per fathom by the machine, at what rate it has been bored, what power has been required for doing this, and if any person can be allowed to see it by applying to the local agents?—A MINER: *Tavistock, Sept.* 15.

HYDRO-MOTEUR.—We are requested to state, in reply to "G. J. R.," in the Journal of Aug. 27, that Mr. Boutet has been so engaged in making arrangements for introducing his railway-brake, that the completion of his hydraulic machinery has been temporarily suspended. It will be duly announced when the hydro-moteur can be seen in operation.

IMPROVEMENTS IN PUMPS.—In the article under this title, published in the Journal of Sept. 3, there are two typographical inaccuracies; the depth from which the water is pumped should be 177 *feet;* the quantity per minute raised *(by actual measurement)* 95 gallons.—J. U. B.

MINING AT OKEHAMPTON (Devon).—Much is said about the mining probabilities in this neighbourhood, but not a word respecting the only mine that I have heard of which has sold ore. The Farsdon Mine, at South Zeal, four miles from Okehampton, has been regularly selling ore from the commencement of the undertaking, and, in my opinion, only requires to be developed to become a dividend mine. A mine that is selling from 30 to 40 tons of ore per month, at a fair average price, does not require puffing, but ought not to be neglected.—A LOOKER-ON.

GREAT WHEAL VOR.—The quarterly meeting of this company will be held on Wednesday, when shareholders will be made acquainted with the value of the property they possess. Ivey's shaft, below the slide, is going down on a lode of great richness; the levels east and west are very productive. The 142, 152, 162, 174, and 184, below the slide in Metal shaft, five levels one below the other, are all rich. The 184, the lowest level, has a fine course of ore going eastward. From the vastness of the discoveries, the tinstuff is now blocking up the workings; but when the new drawing-engine is at work, which will be in a few weeks, all will be brought to surface, when the returns will be at once increased. The ground already laid open is in itself considered sufficient, without further discoveries, to pay handsome dividends for years to come, and should present prospects continue, of which there appears to be little doubt, these shares may soon be at double their present value, if they do not eventually reach 100*l.*, which, allowing for the difference in the number of shares, would only put them at the present selling price of the Devon Consols, and yet it is only a few years ago that shares changed hands at shillings instead of pounds. So much for steady perseverance, sound management, and working the mine with a view to a permanent and lasting dividend property.—VOR.

FORMATION OF GRANITE.—The letter from Mr. John Jones will appear next week.

WELSH GOLD MINING.—I wish to be strictly correct in anything I advance as to this subject. There is one word in my article in last week's Journal, in the paragraph *fact the first for* 1864, that I did not intend—the word *produced*. It cannot be said now that Clogau produced 2000 ozs. of gold for 1864, although I have no doubt it will do so before the year is out. What I meant to say only was that Clogau has *divided* 2000 ozs. of gold for 1864.—EDWARD DAVIES.

WHEAL BASSET AND GRYLLS.—In the Journal of Sept. 3 there appeared a notice of meeting, said to be held in this mine, at which a call of 7s. 6d. per share was made. This is a mistake, no such meeting having been held or call made. The quarterly meeting will be held one month hence, and no call will then be wanted.—J. B. WILKIN.

DEVON GREAT MARIA.—We cannot publish the letter forwarded from Tavistock unless it has the writer's name attached.

WHEAL HOPE.—On reading last week's Journal, I was glad to find a shareholder express his dissatisfaction both as to the state of the mine and its management—a feeling which doubtless is fully shared by all others who have been induced to invest in the undertaking. After the sanguine statements made by Mr. Reynolds at the previous meetings, and the heavy costs incurred by the erection of machinery, &c., for the proper development of these "imaginary riches," I consider the shareholders had a right to expect at least a partial, if not complete, realisation of those prospects held out to them, instead of the miserable and disheatening report furnished by him at the last meeting. Surely a call of upwards of 1000*l.* only two months since, followed so quickly by another of 500*l.*, fully warrant the shareholders in at once taking the matter in hand, and the sudden and extraordinary falling off in the mine, after so heavy an outlay, enquired into, for it becomes a question for their consideration whether or not its future development ought not to be entrusted to such an agent as can be fully relied upon, and whose recommendations, when carried into effect, would prove of benefit to them instead of disappointment and loss. The report of the inspection of the mine by the agent appointed by the committee at the last meeting will, it is to be hoped, prove more satisfactory than that of Mr. Reynolds, and thus afford the shareholders some hope that the crusher erected in June last under the latter's recommendation, and which was to greatly increase subsequent returns, may have more work to do than the crushing of 15 tons of ore during the ensuing two months.—ANOTHER SHAREHOLDER.

ENGLISH AND AUSTRALIAN COPPER COMPANY.—How is it to be accounted for that the sweeping assertions made by a correspondent of the Journal some two or three weeks since with reference to the financial arrangements of this company have not been answered? Are we, as shareholders, left to infer that the directors are paying 8 and 9 per cent. for the discounting of bills in order to give shareholders a dividend at the rate of 4 per cent.? I, for one, have much greater confidence in the commercial ability of the executive than to believe that they would adopt a course so unsound, but, at the same time, it would have been satisfactory had someone officially connected with the company come forward and contradicted statements which cannot but adversely affect the market value of the undertaking.—A SHAREHOLDER.

NANTES MINE.—The letter of "Shareholder" is hardly adapted for publication. The writer should apply to the directors for the information he requires, and attend the next meeting, when he can state his opinions, and recommend such proceedings as may then appear desirable.

ENGLAND'S MINING SCHOOL, AND SPECULATION IN PIG-IRON WARRANTS.—In last week's Journal there was unfortunately a line transposed. The first line of the second column of page 639 should be the first line of the first column.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, SEPTEMBER 17, 1864.

The annual meeting of the British Association for the Advancement of Science, held this year at Bath, commenced on Wednesday, when the President—Sir Charles Lyell, Bart.—delivered one of the most interesting addresses of which the Association can boast. He remarks that while he was pursuing his enquiries respecting the Bath waters he learned casually that a hot spring had been discovered at a great depth in a copper mine near Redruth, in Cornwall, having about as high a temperature as that of the Bath waters, and of which, strange to say, no account has yet been published. "It seems that, in the year 1839, a level was driven from an old shaft, so as to intersect a rich copper mine at the depth of 1350 feet from the surface. This lode, or metalliferous fissure, occurred in what were formerly called the United Mines, and which have since been named the Clifford Amalgamated Mines. Through the contents of the lode a powerful spring of hot water was observe to rise, which has continued to flow with undiminished strength ever since. At my request, Mr. Horton Davey, of Redruth, had the kindness to send up to London many gallons of this water, which have been analysed by Professor William Allen Miller, F.R.S., who finds that the quantity of solid matter is so great as to exceed by more than four times the proportion of that yielded by the Bath waters. Its composition is also in many respects very different; for it contains but little sulphate of lime, and is almost free from the salts of magnesium. It is rich in the chlorides of calcium and sodium, and it contains one of the new metals—cæsium, never before detected in any mineral spring in England: but its peculiar characteristic is the extraordinary abundance of lithium, of which a mere trace had been found by Professor Roscoe in the Bath waters; whereas in this Cornish hot spring this metal constitutes no less than a twenty-sixth part of the whole of the solid contents, which, as before stated, are so voluminous. When Professor Miller exposed some of these contents to the test of spectrum analysis, he gave me an opportunity of seeing the beautiful bright crimson line which the lithium produces in the spectrum.

Lithium was first made known in 1817 by Arfvedsen, who extracted it from petalite; and it was believed to be extremely rare, until Bunsen and Kirchhoff, in 1860, by means of spectrum analysis, showed that it was a most widely diffused substance, existing in minute quantities in almost all mineral waters and in the sea, as well as in milk, human blood, and the ashes of some plants. It has already been used in medicine, and we may, therefore, hope that, now that it is obtainable in large quantities, and at a much cheaper rate than before the Wheal Clifford hot spring was analysed, it may become of high value. According to a rough estimate which has been sent to me by Mr. Davey, the Wheal Clifford spring yields no less than 250 gallons per minute, which is almost equal to the discharge of the King's Bath, or chief spring of this city. As to the gases emitted, they are the same as those of the Bath water—namely, carbonic acid, oxygen, and nitrogen. Mr. Warington Smyth, who had already visited the Wheal Clifford lode in 1858, re-examined it in July last, chiefly with the view of replying to several queries which I had put to him; and, in spite of the stifling heat, ascertained the geological structure of the lode and the exact temperature of the water. This last he found to be 122° Fahr. at the depth of 1350 feet: but he scarcely doubts that the thermometer would stand 2 or 3° higher at a distance of 200 feet to the eastward, where the water is known to gush up more freely. The Wheal Clifford is a fissure varying in width from 6 to 12 feet, one wall consisting of elvan or porphyritic granite, and the other of killas or clay-slate. Along the line of the rent, which runs east and west, there has been a light throw or shift of the rocks. The vein stuff is chiefly formed of cellular pyrites of copper and iron, the porous nature of which allows the hot water to percolate freely through it. It seems, however, that in the continuation upwards of the same fissure little or no metalliferous ore was deposited, but, in its place, quartz and other impermeable substances, which obstructed the course of the hot spring, so as to prevent its flowing out on the surface of the country. It has been always a favourite theory of the miners that the high temperature of this Cornish spring is due to the oxidation of the sulphurets of copper and iron, which are decomposed when air is admitted. That such oxidation must have some slight effect is undeniable; but that it materially influences the temperature of so large a body of water is out of the question. Its effect must be almost insensible; for Professor Miller has scarcely been able to detect any sulphuric acid in the water, and a minute trace only of iron and copper in solution.

When we compare the temperature of the Bath springs, which issue at a level of less than 100 feet above the sea, with the Wheal Clifford spring found at a depth of 1350 ft. from the surface, we must, of course, make allowance for the increase of heat always experienced when we descend into the interior of the earth. The difference would amount to about 20° Fahr., if we adopt the estimate deduced by Mr. Hopkins from an accurate series of observations made in the Monkwearmouth shaft, near Durham, and in the Dukinfield shaft, near Manchester, each of them 2000 feet in depth. In these shafts the temperature was found to rise at the rate of only 1° Fahr. for every increase of depth of from 65 to 70 feet. But if the Wheal Clifford spring, instead of being arrested in its upward course, had continued to rise freely through porous and loose materials so as to reach the surface, it would, probably, not have lost anything approaching to 20° Fahr., since the renewed heat derived from below would have warmed the walls and contents of the lode, so as to raise their temperature above that which would naturally belong to the rocks at corresponding levels on each side of the lode. The almost entire absence of magnesium raises an obvious objection to the hypothesis of this spring deriving its waters from the sea; or if such a source be suggested for the salt and other marine products, we should be under the necessity of supposing the magnesium to be left behind in combination with some of the elements of the decomposed and altered rocks through which the thermal waters may have passed.

Hot springs are, for the most part, charged with alkaline and other highly soluable substances, and, as a rule, are barren of the precious metals—gold, silver, and copper, as well as of tin, platinum, lead, and many others, a slight trace of copper in the Bath waters being exceptional. Nevertheless, there is a strong presumption that there exists some relationship between the action of thermal waters and the filling of rents with the metallic ores. The component elements of these ores may, in the first instance, arise from great depths in a state of sublimation or of solution in intensely heated water, and may then be precipitated on the walls of a fissure as soon as the ascending vapours or fluids begin to part with some of their heat. Almost everything, save the alkaline metals, silica, and certain gases, may thus be left behind long before the spring reaches the earth's surface. If this theory be adopted, it will follow that the metalliferous portion of a fissure, originally thousands of feet or fathoms deep, will never be exposed in regions accessible to the miner until it has been upheaved by a long series of convulsions, and until the higher parts of the same rent, together with its contents and the rocks which it had traversed, have been removed by aqueous denudation. Ages before such changes are accomplished thermal and mineral springs will have ceased to act; so that the want of identity between the mineral ingredients of hot springs and the contents of metalliferous veins, instead of militating against their intimate relationship, is in favour of both being the complementary results of one and the same natural operation.

But there are other characters in the structure of the earth's crust more mysterious in their nature than the phenomena of metalliferous veins, on which the study of hot springs has thrown light—I allude to the metamorphism of sedimentary rocks. Various experiments have led to the conclusion that the minerals which enter most largely into the composition of the metamorphic rocks have not been formed by crystallising from a state of fusion, or in the dry way, but that they have been derived from liquid solutions, or in the wet way—a process requiring a far less intense degree of heat. Thermal springs, charged with carbonic acid and with hydro-fluoric acid (which last is often present in small quantities), are powerful causes of decomposition and chemical reaction in rocks through which they percolate.

The study, of late years, of the constituent parts of granite has in like manner led to the conclusion that their consolidation has taken place at temperatures far below those formerly supposed to be indispensable. Gustav Rose has pointed out that the quartz of granite has the specific gravity of 2·6, which characterises silica when it is precipitated from a liquid solvent, and not that inferior density—2·3, which belongs to it when it cools and solidifies in the dry way from a state of fusion.

But some geologists, when made aware of the intervention on a large scale of water in the formation of the component minerals of the granitic and volcanic rocks, appear of late years to have been too much disposed to dispense with intense heat when accounting for the formation of the crystalline and unstratified rocks. As water in a state of solid combination enters largely into the aluminous and some other minerals, and, therefore, plays no small part in the composition of the earth's crust, it follows that, when rocks are melted, water must be present, independently of the supplies of rain-water and sea-water which find their way into the regions of subterranean heat. But the existence of water under great pressure affords no argument against our attributing an excessively high temperature to the mass with which it is mixed up. Still less does the point to which the melted matter must be cooled down before it consolidates or crystallises into lava or granite afford any test of the degree of heat which the same matter must have acquired when it was melted and made to form lakes and seas in the interior of the earth's crust."

A number of interesting papers were submitted to the several sections, and we shall publish as opportunity offers abstracts of such of them as relate to subjects in which our readers are concerned; in the meantime, it may be mentioned that after the reading of Dr. Gladstone's report on the application of gun-cotton to warlike purposes before the Chemical Section, Dr. Miller read a letter from Mr. Prentice, describing the blasting operation with gun-cotton in Wales as being very successful, and he gives the following table, showing the comparative weight of powder and gun-cotton necessary for blasting:—

DEPHWYS QUARRY, No. 1, FOUR HOLES.

	Depth.	Diameter.	Estimated powder charge.	Gun-cotton.
1	16	1¼	·382 of lbs.	·049 of lbs.
2	18	1¼	·511 "	·074 "
3	15	1¼	·382 "	·049 "
4	16	1¼	·424 "	·049 "

Mr. ABEL then gave a brief account of the manufacture of gun-cotton, and by experiments showed how gun-cotton in a loose state burned instantaneously, and according to the tightness with which it was twisted into strands the combustion became more gradual and regular. He explained that the combustion was the result of the gases given off by the heating of the cotton, and by experiments in which he removed the gas demonstrated the fact.—Admiral MAURY explained that whilst he could not desert his old friend gunpowder, there were many cases in actual warfare where the use of gun-cotton would be preferable.—Mr. SCOTT RUSSELL, at considerable length, and with much detail, described its uses in mechanics as a means of blasting or removing rock. He agreed that for that purpose it had six times the power of gunpowder, and was in every way its superior. He approved of the use of gun-cotton for throwing projectiles.—Some further discussion ensued, which tended to show that the general feeling of the meeting was, that in every qualification but stability gun-cotton is superior to powder.

THE TIN TRADE, AND THE SMELTERS.

After all that has of late been said on the subject of the English Tin Trade, as applying to the prospects of our Cornish mines, and the best mode of selling their produce, the miner may well ask what good has it done him? and to such a question we can but candidly reply that we can find no tangible good as the result of it. Many persons are, no doubt, thoroughly sick of this oft-repeated subject; but whilst much has been written about it, no opinion has been publicly elicited from the smelters themselves. Whether this is from indifference to the subject, or from a desire to avoid that unpleasant prominence, to use no stronger word, which the smelter who first moves in the matter of altering the present conditions of sale will undoubtedly encounter, we cannot say. However this may be, the discussion, everyone must allow, has hitherto been entirely on one side. Taking this into consideration, we think it may be well to point out to the miner his present position, and the probable results of the alteration he demands. To start with, the miner cannot now say that tin smelting is a monopoly. With nine separate smelting firms in Cornwall, this plea of old can no longer be urged. He cannot now say that he has only one smelting-house to go to, for he can, if he likes, transfer his stuff from smelting-house to smelting-house, from Treriffe to Charlestown, and sell his ore to the best bidder. This is undoubtedly true in most of our mines, and can only be untrue in cases where a smelting firm is a large shareholder in a mine, when the mine is considered under the obligation to sell its stuff to this particular firm. This is, we think, the greatest argument in favour of a public sale of tin ore in Cornwall. In his desire, however, to abolish this monopoly of his produce, has it never struck the miner that by offering his ore for sale by public tender he will drive the smelters from investing capital so largely as they do in our Cornish tin mines. It is not our desire, in starting the idea, to play the part of alarmists, but we would have the miner remember that he has not done himself much good by increasing the number of tin smelters in the West, and would warn him now to take counsel of himself, whether he will be wise in driving tin smelters from the field as mine adventurers, a result we think most possible if all Cornish tin is in future sold at public ticketings.

Now, we cannot help expressing the opinion that it has been somewhat harsh on the part of the miner to suppose that the smelters are always desirous to monopolise the profits of the tin trade, and to reduce to the lowest point the profits of the miner, surely such a policy would be most short-sighted. At all events, the notion has existed for a long time, and the new smelting firms are the consequence of it, the result of whose operations has satisfactorily proved the mistake of the miner; for it has certainly not increased the price paid for black tin, although it may have diminished the profits of the smelter. We do not mean to assert that the present price of tin is the result of the creation of the new smelters; but what we mean to express is, that the competition has resolved itself into a struggle, not as to who shall get the most ore, but as to who shall sell the most metal. It is an undoubted fact that much money has been made in tin smelting, and we believe that this profit has been shared to a great extent by the Cornish miner. At the present time we think the Cornish miner would better employ his time in attempts to economise the labour of working his mine, and to improve his dressing machinery, than to squabbling with the smelter about his share of the profits. No branch of mining industry would more amply repay the experimental mechanic than the Cornish tin dressing-floor, for we are convinced improvements may be effected in most of its departments. No one will deny that many of our Cornish dressing-floors are economically and well laid out; but we must lessen the great cost of our processes, and the present amount of loss on our smaller mines must *go scot*.

In tin smelting, also, there is great room for improvement. For centuries we have held to the same processes in assaying and smelting our tin ores. We still assay by a process rough, and of necessity inaccurate, and which although peculiarly adapted to the demands of the smelter, who requires a qualitative as well as a quantitative analysis of the ore, yet is the process undoubtedly capable of great improvement. As to the present mode of smelting, we maintain that it is most unsatisfactory. The smelter requires that the ore shall be purified to a high degree before he can reduce it, which increases the labour of the miner to an enormous extent. Again, the loss in smelting is very great—in fact, much higher than it ought to be. We do not mean to say that we are prepared to propose a better method, but we do think that if metallurgists paid some attention to the subject improvements ought to be the result.

When a man is hurt, his natural tendency is to turn round and accuse somebody of injuring him; he should, however, take care to throw the blame on the one who has really wronged him. Now, the Cornish miner has suffered materially from the great reduction of late in the value of tin, and he has turned round and abused most wrongfully the smelters, who are as innocent of all blame on the subject as so many children.

We must here again repeat that the present low price of tin resolves itself into an excess of supply over the demand for the article. Statistics are at all times dull and uninteresting, but they are most useful, and, in the present instance, essential for the proof of our assertion. Cornwall, in 1863, produced 1000 tons of ore in excess of her total yield in 1862, and she has kept well up to this great excess for the first six months of this year. The East can virtually send to Europe just as much tin as the Dutch like, and the amount that could be thrown into the market from that source, at any time, would completely swamp the produce of our English mines. We do not think such a contingency probable, but it is at any time possible, as the tin of the Eastern Archipelago is practically inexhaustible. With this increasing supply from all sources, the demand has undoubtedly diminished. America requires little or no tin, and she used to consume a large quantity. Her condition of warfare has crippled not only her own trade, but that of other nations also. We would then assure the miner it is rather to these facts than to the imaginary grievance of the smelter absorbing all the profits of the trade that he should look to as the cause of his difficulty. These facts he cannot alter, and we would, therefore, advise him to attempt rather to diminish the cost of preparing his ore for the market, for in such attempts he may better his condition, whilst by harping on imaginary grievances he can do no good.

MINING BY MACHINERY.

Amongst the many useful and ingenious inventions on view at the exhibition of the Royal Polytechnic Institution of Cornwall, was the boring machine invented by Mr. Edward Crease, to which frequent reference has already been made in the *Mining Journal*. The inventor has spent some six years in bringing the machine to its present state of perfection, and it is a sufficient proof of its practical value, that the judges, after having fully tested its various movements, awarded it a prize medal. It was exhibited under the auspices of the Miners' Association of Cornwall and Devon, and the advantages claimed for it are its simplicity of construction, the mathematical precision of its movements, and the facility and economy of its working. Underground operations have hitherto been conducted on the same slow, expensive, and unchanged system that has been in use since the invention of gunpowder; and it is estimated that the same price is paid, and the same time is occupied, for opening a fathom of ground as, with suitable machinery, would be requisite for double or treble the quantity. It is considered that with good excavating machinery there would be no fear of mining adventures being abandoned in despair, after years of anxiety and outlay; nor of miners exhausting one discovery before making another; nor of paying double the value for the ore raised—the consequence being that many mines now languishing would be paying enormous profits. The machine is described as a pillar fixed to a stand on wheels, intended for a tramroad, and by means of a screw on the top of the pillar it can be screwed to the back of the level, and made as firm as the surrounding rock. On this pillar is a socket, which, with the assistance of a rack and pinion, can be raised or depressed at pleasure: attached to this socket is another, through which a round hollow bar passes, on the end of which is the machine (3 feet long only), which works on a slide by means of a screw attached to the self-acting motion. The machine itself is attached to the bar by a swivel-joint, and has a universal motion, to enable it to bore a hole at any angle, and in any position, it is possible to bore by hand—indeed, so thoroughly to command the ground as to enable the operators to take every advantage of the cleavage, so that when the holes are blasted the utmost possible amount of rock should be dislodged. It is worked by compressed air, and only requires a pressure of from 15 lbs. to 20 lbs. per inch; a pressure so small that the power consumed by working the air-pump is almost inappreciable when attached to any motive-power that may exist on the mine. In this trial, when worked only with half its estimated power, it bored holes through exceedingly hard granite at the rate of 1 in. per minute, and there appears to be no reason why the speed should not be trebled. Its weight is under 15 cwts., and no doubt is entertained of its speedy and universal adoption.

PREVENTION OF RAILWAY ACCIDENTS.

Some few months since we described a novel and very efficient brake for railway trains, invented by Mr. C. Boutet, and arrangements are now in progress for its practical application upon one of the principal lines of railway. In all the brakes at present in general use the difficulty of bringing them into operation increases precisely in the same proportion as the necessity for their immediate action; in other words, the difficulty of keeping the brake-blocks against the periphery of the wheel is greater in proportion as the speed at which the train is moving is higher. So well is this fact known, that in the attempt to produce an instantaneous brake many inventors have abandoned the hope of succeeding by increasing the pressure exerted upon the brake-block, and have resorted to such means as the removal of the entire train from the rails, by running the wheels into fixed shoes, and other contrivances of an equally objectionable nature. Mr. Boutet, on the contrary, thoroughly appreciates the value of retaining the existing system of brake-blocks, which have undoubted advantages over every other impeding power that has been applied; but he abandons the notion of using the manual power of the guard in opposition to the entire power of a train moving at the rate of, perhaps, 40 or 50 miles an hour; it is the power resulting from the forward movement of the train that he applies to arrest its progress.

We have already explained that the brake-blocks are of the ordinary construction, so that there is no greater possibility of inconvenience resulting from the sudden action than with the brake at present in use, the power applied being, in fact, similar in character, though considerably greater, than that now employed. The brake-blocks are affixed to a frame which is hinged to the body of the carriage, and this frame is put in communication by means of a flat chain, with a strong collar, which fits upon the axle of the wheels. This collar being loose on the axle, the forward motion of the train is not interfered with in any way, whilst there is no danger to be feared, the frames carrying the brake-blocks hanging away from the wheels, and the loose collar permitting the axle easily to rotate within it. But upon the same axle there is also a fast collar, and as the fast and loose collar are each provided with strong inclined teeth, the guard has simply to give a transverse movement to the loose collar to cause the teeth to take into each other, the whole being thus made thoroughly rigid. The instant the loose collar becomes fixed, the flat chain winds itself upon the axle, drawing the frame and brake-blocks tightly against the periphery of the wheel, the greater power being applied the greater may be the tendency of the wheels to rotate. A similar arrangement being provided beneath as many carriages as may be necessary in proportion to the length of the train, it is only necessary to connect each arrangement for throwing the collars in gear with the frame of that next behind it, and the whole brake power in the train is applied in regular succession from the last carriage, the train being thus brought to a stand instantaneously, and without the slightest concussion.

A more satisfactory evidence of the absence of shock in stopping the train could scarcely be needed than that afforded by the working model now exhibited at 41, Bloomsbury-square, and in which the various parts of the line and rolling-stock are accurately represented to scale. A glass of water was placed upon one of the carriages of the train, which was then forced down a steep incline at a high speed, and upon the brake being applied the train was at once brought to a dead stand without upsetting a drop. We understand that a few influential capitalists are providing the necessary funds for practically and completely testing the invention, and that to these some privileges are to be reserved in the company, with a capital of 150,000*l.*, in shares of 20*l.* each, which it is proposed to form for deve-

loping the invention, as well as that for the improved system of self-acting signals, which we have already described.

REPORT FROM NORTHUMBERLAND AND DURHAM.

SEPT. 15.—The state of trade here has caused an almost unprecedented demand for unskilled labourers, the consequence being that increased wages are demanded by that class of men. The amount of new work on hand on the rivers Tyne, Wear, and Tees—that is, new shipbuilding yards, ironworks, and chemical works, on a large scale, to say nothing of smaller concerns—is very great, and, as a natural consequence, there is much competition for many classes of skilled labourers, as well as those of a lower grade, causing a considerable advance in the rate of wages. But this, until lately, has not been attended by any ill consequences, the prices having naturally followed the rate of demand; but, as it almost always happens where large bodies of men are concerned, when they feel a little power they proceed to use it in the most repulsive way. They form themselves into a Union, and too frequently usurp the position of masters. In some cases the grievance is some foreman, or even a policeman—as in the recent case at the Tudhoe Ironworks, where the acting policeman refuses to allow beer to be taken into the works, and orders are given to the manager to discharge those parties; of course he cannot do this, and the consequence is a collision, and too often a strike. In other cases notice is served for a certain advance, and on this not being complied with a strike is resorted to. Of course, those strikes invariably inflict great loss and injury, not only on the masters, but also on the men themselves, and, indeed, on the trade generally. We cannot see the least necessity or use for the Unions or strikes; the demand must, in the great majority of cases, cause prices to rise to the full value, and no power on earth can raise or keep them above this level; and when we consider that the men are not bound for any lengthened term, and, therefore, can pass freely from one work to another, and we look at the large population of this district, and the close proximity of large works of all kinds, what necessity can there be for such combinations? However, in the present state of education amongst those men, such things, it appears, may be looked for with certainty, and this most seriously affects the prospect and rate of progress of the trade of the country. Perhaps the greatest want of the time is a sufficient number of schools to educate the young. Mechanics' Institutes and other similar institutions will prove, comparatively, of little use, unless the workmen of the country receive when young the rudiments of knowledge at school. Much has been done in this way, but much still remains to be done; and it is the opinion of many that the workmen of England will never be generally educated until the tuition of children is made compulsory by the Government.

The inquest on the bodies of the men killed by the explosion at Seghill Colliery was held on Thursday. The evidence went to show that up to the afternoon of the explosion a good current of air had existed in the workings. No complaint of the existence of gas had been made to the overman, but the men who had been hewing on the day in that part of the mine where the explosion occurred said that some slight falls of stone had taken place. After the explosion, one of the lamps was found, which appeared to have been injured by a blow, and it was conjectured that a fall of coal had caused the injury, and that a slight escape of gas having taken place at the time, the light had been thus communicated to it, causing the explosion.—The jury returned a verdict of "Accidental Death."

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

SEPT. 15.—There is one topic amongst those engaged in the Iron and Mineral Trades of South Staffordshire, and that is the MINERS' STRIKE. It has extended its limits from Bilston to West Bromwich; men who were receiving the full wages have been turned out to stop the supply of coal, and on Sunday night some three thousand men and women, headed by bands of music, marched from Great Bridge to Brownhills, 12 miles, reaching their destination early on Monday morning, and by their music, and the noise of their march, attracting a great crowd. The object of the visit was to induce the colliers on Cannock Chase to require their masters to cease supplying any coal for the districts where the strike prevails, and a resolution was passed pledging the Cannock Chase colliers to that course. It has been stated that the masters agreed to do so, but this is denied. There was a second meeting held at Brownhills that morning, and then the crowd dispersed over the district, begging sometimes under the cloak of selling some paper. Colliers soliciting alms have penetrated into the rural districts, and the greatest anxiety is felt for the peace of the country. The police are employed night and day, but the assemblages in the mornings continue, and it is difficult, from the fears of the miners, to get evidence against the persons who threaten men with death if they go to work. Some men have been sent to prison for causing violence towards miners, and threatening them. The ruling idea is evidently the same as that which reigned at the French Revolution, where the triumph of the anticipated millenium was supposed to be hindered by the machinations of aristocrats, and so one after another was swept away to the guillotine, in the hope that at last the evil would be extirpated. So these men fancy that if the Union could but be omnipotent they would triumph, and hence the rage they entertain for every man who works contrary to their dictum. The proprietors of mines met on Wednesday at Wolverhampton, and appointed a deputation to prevent the assemblages of men for the purpose of intimidating those who wish to work. Meanwhile, the men are starving, and the feeling which governs them was well expressed by a woman at the Dudley Police Court, on Monday, who admitted that she had held a man to prevent his going to work, and, when reminded that this was a punishable offence, she said "she thought they ought to stick out for the sake of their fellow-creatures," adding, when told that she was liable to be sent to prison, "I thought I might just as well go there, and be kept for three months, as sit at home and starve." Another instance of the desperation which is beginning to prevail amongst those on strike, is that at Bilston the proposal to give the usual fortnight's notice, prior to leaving off work, is opposed, and it is desired to cease work at once, though the penalty is the goal. The promoters of the strike want plainly to strike a blow which will compel submission. The masters, however, seem resolved, and it is a question of which can afford to wait longest.

In the Potteries special rules, under the Factory Acts, are being adopted, with the view mainly of compelling ventilation, and the regular cleansing of the rooms in which the work is carried on. Workmen disobeying these rules, one of which forbids smoking, are to be fined, and the amount paid to the sick fund of the manufactory, or, if there be no such fund, to the North Staffordshire Infirmary.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

SEPT. 15.—The high rate of money and the unsettled state of the money market are operating prejudicially upon the Iron Trade, as regards speculative transactions, but the orders in hand and the enquiry for home consumption keep the trade in a buoyant state. There is an active demand for railway iron, and as Parliament has given its sanction to very many of the new lines applied for, there will, no doubt, be a large demand for railway iron throughout the winter. The new line from Bedford to London has been commenced, which will give to the Midland, when completed, a direct entry of their own into the great metropolis. The Midland have made arrangements, and will shortly commence running mails direct to and from London on their own account. The enquiry for plates and bars is tolerably good, and the advices from the Continent convey a hopeful state of things as regards the iron trade. The Coal Trade is unusually active, and not only is the demand for home consumption brisk, but there are large export orders, which has a tendency to keep up the demand. The South Yorkshire trade is exceedingly good, and all the collieries, except the one now on strike, are fully employed to meet the demand. The enquiry for Yorkshire Coal from London is exceedingly large, owing to the merchants laying in their stocks for winter. There are very large orders for coal from Hull, for shipment to various parts. There was scarcely any enquiry a short time ago, and now we have a driving traffic to that port from South Yorkshire collieries alone of about 3000 tons per week. The hard coal of Derbyshire is much sought after for steam and locomotive purposes, and a ready market is found for all that can be produced. There is a scarcity of miners at some of the larger collieries, and the agents have been dispatched into the mining districts in search of labour.

The development of the minerals of Derbyshire appears to be going on very satisfactorily. Several new works of large extent are being rapidly pushed forward, so that in the course of next spring the get of coal in North Derbyshire will be materially increased. Mr. Plevins, of Dunstan, has recently got his new colliery at Monkwood at work, and a fine class of coal is being drawn from it. The Chesterfield and Midland Silkstone Company have had to contend with a vast quantity of water, but by the aid of powerful pumps, and a fine Cornish engine, they have mastered it, and are now within a very short distance of the black shale bed of coal. In the same valley, and within a few minutes walk, is the new works of the Devonshire Silkstone Company, and it is remarkable that not a drop of water has yet impeded the sinking operations, though their neighbours, the Chesterfield and Silkstone, have been inundated. It is said by some that the Devonshire Company, when lower down the strata, will meet with their due share of water. From the appearance of the materials which is raised from the shafts of the Devonshire Company's works it would appear that water has existed in the stratum, and has been drawn away by the pumping operations at the adjoining mines. However, they have gone to a depth of 50 yards without meeting with water, and the managers are sanguine that they have pitched upon a site for their works peculiarly fortunate. Time will best test their judgment and their hopes. Mr. Bevan, of Northampton, is putting down a colliery at South Wingfield, in the neighbourhood of Alfreton, where a large tract of mineral ground has been purchased. A line of rails from the main line of works to the Midland is being constructed, so that there will be railway transit to and from the pit's mouth. The new works of the Clay-Cross Company, at Pilsley, are progressing very rapidly. The shaft has been taken down a considerable distance, and the working plant is in a forward state. Much is promised for Derbyshire by the formation of the new joint-stock companies as regards the development of trade, but at present the projected new works and extension of existing works are in embryo.

The local share markets are somewhat affected by the high price of money; and, though railway traffics are good, railway stock is not so largely invested in, on account of the drain of money for joint-stock investment.

REPORT FROM MONMOUTH AND SOUTH WALES.

SEPT. 15.—For the last three or four weeks mention has been made in my reports that the Iron Trade of Monmouthshire and South Wales showed increased firmness, and it is satisfactory to add this week that, upon the whole, the trade retains its vitality. Certainly the advance in the rate of discount, and the unfavourable tendency of the money market, cannot fail to have some influence on the trade, especially for exports; but, on the other hand, there is such a complete absence of speculation, and the demand is of so *bona fide* a character, that makers are able to maintain their prices. During the past three or four months buyers have hardly given out a single specification except to meet immediate requirements, and without a doubt this accounts in a great measure for the firmness evinced in the trade at a time when the money market of the country is in such an unsettled and disturbed state. There is a large amount of activity shown in the Steam Coal Trade, and merchants are doing as large a business as their supplies will allow them. The colliers are, as a rule, on full time, and they are working with a regularity that does them credit. House coal commands a good sale, and there are fewer complaints of scarcity of vessels. A slight change has to be recorded in Tin-plates in favour of sellers, and it is to be hoped that this is only the prelude to still further improvement.

The Varteg furnaces have been relinquished by Messrs. Partridge and Jones, and the works have been taken by Messrs. G. E. Bevan and Co., proprietors of the adjoining Golynos Works. There are two furnaces at Varteg, one of which being now in blast. Messrs. Bevan and Co. have been exceedingly successful in producing good iron from their Northamptonshire ore at Golynos, and it is believed the firm will use the ore at Varteg as well.

The proceedings of the "Union" at some of the tin-plates works of the district cause disquietude, and there are apprehensions that a strike will be the result. It appears that the application of the men for an increase of wages has been acceded to by nearly every maker, but there is continual meddling on the part of the "Union" in matters of detail. This has led to a determination on the part of Mr. Budd, Mr. Gilbertson, and other large proprietors, that they will not employ anyone connected with the Union, and they have already given proofs that they intend to adhere to this to the letter. The men, as might naturally be expected, complain of what they term the arbitrary disposition of their masters, but as yet, and that wisely too, they have done nothing more than complain. The trade is in a bad state enough without the evils of a strike, and, whatever takes place, it is to be hoped the district will be spared from the disastrous consequences of a turn out.

The Machen Company have commenced to ship Lantwit coal at Newport, from their new Bedwas Pit. The company have an excellent taking, and it is believed that they will ultimately realise handsome returns on the capital expended in opening and developing the colliery.

The arrivals at Swansea include—the Mary Ann Holman, from Huasco, with 423 tons of copper regulus, for H. Bath and Sons; Capricorn, from Caldera, with 530 tons copper regulus, for H. Bath and Sons; Rienzi, from St. Brient, with 15 tons of silver ore, for H. Bath and Sons; Margaret, from Tindered, with 212 tons zinc ore, for H. Bath and Sons.

TRADE OF THE SOUTH WALES PORTS.—The following are the returns of the exports of coal during the month of August:—

	Aug., 1864.	July, 1864.	Aug., 1863.
Cardiff ..... Tons	138,268	105,830	126,483
Newport	28,463	17,675	12,394
Swansea	51,041	35,133	34,007
Llanelly	13,729	10,675	11,050

The shipments coastwise were as follows:—

	Aug., 1864.	July, 1864.	Aug., 1863.
Cardiff ..... Tons	74,067	70,722	80,708
Newport	56,133	52,422	50,665
Swansea	27,948	23,491	18,889
Llanelly	24,459	26,679	26,888

The above returns show that the coal trade, upon the whole, was in a decidedly favourable state during the month, and there was an increase in the shipments from nearly every port. Newport shows the largest proportionate increase, the export returns being no less than 133 per cent. higher than last year. Aberdare steam is now shipped at Newport, and there is no doubt that ultimately it will be a strong competitor with Cardiff for the steam coal trade. Swansea comes next, and the opening of the narrow guage on the Vale of Neath continues to tell favourably on the monthly returns. Cardiff is third in point of proportion, and it must be admitted it maintains an unmistakable head of the other ports: 12,370 tons of iron were exported from Cardiff, against 14,123 tons in the previous month; and Newport exported 11,383 tons, as compared with 9927 tons in July. From the two ports there were cleared for New York 8000 tons of iron; Quebec, 1000 tons; Buenos Ayres, 3000 tons. These figures prove that New York alone takes more than one-third of the whole shipments—a fact which gives some idea of how far the South Wales makers have to depend on American trade.

THE HARTLEY FUND SURPLUS—SOUTH-WESTERN AND SOUTH WALES MINING DISTRICTS—*(From our Correspondent).*—It is now nearly twelve months since the Hartley Fund Committee apprised the Inspectors of Mines of the different districts that the surplus fund was then ready for distribution. The South Wales and South-Western Mining Districts, which include the whole of South Wales, Monmouthshire, Forest of Dean, Gloucestershire, Somersetshire, and parts of other counties, came in for their proportionate quota of the surplus, and Mr. Brough and Mr. Evans called meetings of the colliery proprietors, and the respective sums were directed to be invested in the names of trustees appointed at these meetings. Mr. Abraham Darby, Sir Thomas Phillips, and Mr. Trotter were nominated trustees for the South-Western district, and Mr. G. T. Clark, and other gentlemen, for the South Wales district, and I may add, that better men could not have been selected. When the meetings were held, it was generally understood that the money was to form the nucleus of a larger fund for the relief of colliers and their families in cases of accident, and that the masters were prepared to subscribe handsomely to the fund, provided the men contributed as well. It may be naturally asked,—What has been done in the matter since? and the reply is—Positively nothing. And, worse than all, the sums received from the Hartley Committee are lying idle at the banks, when cases continually occur that deserve relief. I will mention two instances, one the explosion at Abernant, and the other the explosion at the Glyn Pits, Pontypool. Here are two cases that certainly called for assistance, and the money could not be better employed than by granting a monthly allowance to the poor widows and orphans. Let the committees and trustees awake from their supineness, and devise some plan for the distribution of the money, and, it is to be hoped, make the necessary arrangements as well to increase the fund by contributions from both employers and employed, as originally suggested. My object in writing is not to find fault with the committee or trustees, for they have, very probably, with their numerous engagements, forgotten about the fund; but the public have a right to know what is proposed to be done with the money, and that it is properly and timely applied, and not left to lie idle at the banks, when cases that deserve relief continually occur.

NEW COAL-CUTTING MACHINE.—A machine of this description was tried at Messrs. Hawks, Crawshay, and Co.'s ironworks, on Saturday. The inventor of the machine is Mr. Burdon, of Team Colliery. There were present at the trial the following viewers and other gentlemen interested in mining operations:—Mr. Barnes, Seaton Delaval Colliery; Mr. T. E. Forster, Seaton Delaval Colliery; Mr. John Peel, Springwell Colliery; Mr. Fryar, viewer, Team Colliery; Mr. Morrison, Waldridge Colliery; Mr. Hirst, Backworth Colliery; Mr. Birkley, Marley Hill Colliery; Mr. E. Potter, Cramlington; Mr. Russell, Gosforth Colliery; Mr. Jobling, Bedside Colliery; Mr. James Easton; Mr. Lishman, viewer, Lambton; Mr. Sanderson, Seaton Delaval; Mr. Barkus, Broomhill Colliery; Mr. Maddison, Burradon Colliery; Mr. Lambton, &c. The following calculations show what the machine is expected to accomplish:—If the machine makes 100 revolutions per minute, and cuts one-sixteenth of an inch for every revolution it will equal 6¼ in. in one minute, or 375 in. per hour, which is equal to 10¾ yards. If kept going, say ten hours per day, it will cut 107½ yards; and if the machine be made to cut 2½ ft. in the coal, which it can do easily, and the seam be 3 ft. high, and cut the distance of 107½ yards, it will equal in weight about 82 tons of coal, so also in proportion according to the thickness of the seam of coal. If the seam be 6 feet, it will cut twice the weight. If the machine should cut 1-8th of an inch per revolution, which the inventor has no doubt it will, it will go twice the distance, and cut twice the weight of coal. As the machine propels itself, it will only take one man and a boy to manage it. It may, perhaps, take two men. It will only cut about 2 inches high from the bottom of the seam; therefore, the small which will be made will be almost nothing, which is a very great advantage to coalowners. The coal on which the machine was tried came from the Seaton Delaval Colliery, which is understood to be as hard as any coal in the Hartley district. A man can only hew about 3¼ tons of this coal, and nearly 1-3d of it is small, which of course reduces the value of the coal hewn. On that ground alone the machine has a very great advantage. It cuts the coal very easily, and there is no question but it will answer in the Hartley seams, if they are laid out properly for it. It cannot be made to suit all collieries and seams of coal, as some seams are soft both top and bottom, and so many props have to be used that there is not room for a machine; and, therefore, under such circumstances cannot be made to answer so well as the man. But in seams where the top and bottom are hard, the machine can be used, provided, of course, that the seam be properly laid out. It is worked by compressed air, and the machine can be made not more than 2 feet high, as the two cylinders, which are 6 or 7 inches diameter, and all the machinery can be put inside the frame, which will be 7½ ft. long 2 ft. 10 in. wide. The men will be protected from the machinery. The inventor has also a model of a machine for wedging the coal down, which can be worked by compressed air, the same as the hewing machine, and likely to be introduced if the hewing machine is found to answer. It can be used either in a low or high seam, it can be elevated from 3 ft. to 6 ft. high, and with a pressure of 20 lbs. per inch will strike the wedge equal to the weight of about 2 tons. It is so simply constructed that one man may easily manage it. All pitmen know that gunpowder is very destructive to the coal. It makes the coal fall much to pieces; in fact, it is the opinion of some that the machine for wedging would pay without the hewing machine, as it would be a saving to the coals. There would not be so much small made, and the coals would keep their size better.—*Newcastle Daily Chronicle.*—[The machine referred to is the invention of Mr. Nellson, of Gateshead, and Mr. Burdon is his patron. This trial was, in some respects, a failure; but there will be another to-day, at which our Correspondent will be present, and prepare a full account for the next Journal.]

THE PRESENT CONDITION OF THE LABOUR MARKET.—THE PRODUCER AND THE CONSUMER—No. II.

BY GEORGE SHEPHERD, C.E.

In my last I gave a sketch of the general state of our labour market, the position of the workmen, the masters, and the consumer. For many years, from the over abundant supply of labour in England, capital has had all its own way. The workman was contented if he could get labour, to keep soul and body together. The position of the workman, producer, and the consumer, reminded one of the triangle duel described by Captain Marryat in one of his works. In this duel the consumer was firing at the producer, the producer firing at the workman. The latter received all the bullets. If one fell there were ten to take his place in the race of competition for work. The facts are now reversed. The workman delivers his shot with great precision; competition, as far as he is concerned, is at an end; he, therefore, remains master of the situation. To this narrow point is this question now reduced. The great Napoleon said it was useless to attempt to reason with a man with an empty stomach. It is equally useless to attempt to reason with either workmen or masters when they see their chance of turning an honest penny. The purchaser then has to bow his head in submission. In times of depression the workman saw, or fancied he saw, every man's hand against him. This impression must be removed, if we are to retain our workmen in England to keep our vast mercantile machine in healthy operation. If the English workman is of inestimable value to the foreigner, he is of more value to England. Without his robust frame to carry on our colliery and other operations, all the mineral wealth of England is a blank. Capital never takes the lead, but it will follow the robust labourer, no matter in what part of the earth he may be located. Capital and labour are bound together like man and wife, and alike inseparable. Therefore, that which constitutes the wealth and strength of a nation, whether it be labour or otherwise, must be guarded with jealous care. At the present time, when the regions in every part of the earth are disclosing to the astonished view of man the wonders of the created universe, when new empires are being formed in Asia, Africa, America, and Australia; when every single settler in these parts soon creates room for two, and every two place for four, and so on in progressive order, it becomes a question for the English producer to decide whether he can afford to lose his labourers, and thereby subject himself to ruin.

It may be said the labour market will find its level; this may be so, when the new regions now opened up to labour are equally populated as England itself. But until then the labourer will always fly to those parts where he can turn his labour to the best account for himself. Our labouring classes in every part of the country now carry on an active correspondence with every part of the world, where either some of their family or friends have gone before; they are as well informed of the state of things in these distant parts as in their own country, and often receive money to assist them to emigrate. We frequently hear this expression when they receive invitations to leave this country—"Well, things must be better where my son, or brother, is than here; he can save money, and pay for me to go out to join him, while, with all my labour here, I have not a feather to fly with. Here we are too thick on the ground, therefore I shall emigrate too. I know how to work when I get there as well as any man; therefore, I have nothing to fear." The decision thus formed, he with his family takes a last farewell of the land of his birth.

It has fallen to the lot of the coal, iron, and mining districts first to feel the weight and perplexities of a scarcity of labour, and with it the strikes and restlessness of the workmen, and the result of each day's experience increases these perplexities. Still, with all this, the workmen are only carrying out the free trade principles laid down by the political economist—that of buying in the cheapest and selling his labour in the best market. This is the prevailing idea with the merchant, the banker, the farmer; in fact, with all classes. Now it has reached the workman, and he, too, is determined to carry it into effect. Those who have not sinned in this respect should cast the first stone at the workmen. The idea of emigrating never occurred to the English workman until his attention was directed to it at public meetings in times of depression. Now the advocates of emigration are the first to complain of the men demanding the worth of their labour. It would be idle in the extreme to blame either the workmen or their masters; but, undoubtedly, it is the late keen competition which has existed in the coal, metal, and iron trades that has driven the skilful workman from England; to such an extent has competition been carried of late years in the Welsh districts, with coal at 8s. per ton, f.o.b. at Cardiff, and rails at 5*l.* per ton. At such prices neither master or workmen could make the two ends meet. In 1862 the largest colliery proprietor in Wales, the late Mr. Powell, at a public meeting at Newport, stated that for several years past he had not received a single shilling in the shape of profits from his collieries; and, when we look at the price the coal was selling for at Cardiff, it requires no large array of figures to enable us to confirm the truth of Mr. Powell's statement. Many of the manufacturers of iron during the past years can also endorse the statements of Mr. Powell, so far as their profits on the manufacture of iron are concerned.

If famine is one great law of the dispersion of communities, so also is a keen commercial competition when carried to extremes. The colonies and foreign nations refuse to take our convicts, but they receive the honest labourer with open arms. If the colonies or other nations bid high for our workmen, the English producer must bid higher. If inducements must be held out for men to join the army and navy to protect the country, the mining interests must hold out equal inducements for their men to remain in England. You may make an agricultural labourer or a railway navvy in a few weeks, but it requires a lifetime of experience underground to make a good collier or miner.

We must also bear in mind that when the workman makes up his mind to emigrate, the only thing he has to do is to dispose of his few goods and chattels; this being done, he has no further anxiety whatever. But it is not so with the coal and ironmasters; they, Tantalus like, are chained to the spot, with perhaps their *all* invested in their works, and are thereby left to fight out the battle in the best way they can. The present crisis shows the result of the masters being left in such a position. Is it not a shortsighted policy to allow the mining interests of England to be dragged into such a state? The collier and miner administer to the health, wealth, and well-being of all classes. Where would be the position of the cotton-spinner, the railway and steam-ship companies, and every class of manufactures, to say nothing about household comforts, without these strong hands to labour to extract the valuable minerals from the bowels of the earth, and there, braving every danger and difficulty, to supply their daily wants? We see, in taking this view of the matter, every class is interested in the great question of keeping on good terms with the collier and miner, and giving them every inducement to remain in the land of their birth, and thereby turning our mineral wealth to its proper account, instead of throwing it broad cast on the world at unremunerative prices. As a proof of the state of the iron trade, if we look over the death roll of our ironmasters, and considering the number of workmen they have employed, the amount of manufactured iron their works have turned out per month, we are astonished at the meagre fortunes they leave behind them, the result of so much labour and industry. Why, in nine cases out of ten their fortunes are not equal to that of the common brewer or gin-spinner of London, and other large towns in England, who amass large fortunes without any care, risk, or anxiety, compared with that of the iron manufacturer; while the workmen of the latter are far better fed, clothed, and housed than those of the former, and to whom, indeed, they are indebted for the very means of creating their vast wealth.

We were informed also by the political economist that by the introduction of machinery to supersede manual labour the workman would reap all the advantage—the machinery would do all the heavy or drudgery work. Now, so far as the general manufacturers and their workmen are concerned, this view of the question was true; but it is the collier, miner, and the iron manufacturer who have given the manufacturing community the means of doing these great things. Are these, then, to remain silent spectators, and the latter to lose all their workmen. When the collier and miner go down the pit, the former cuts his ton of coal, loads it into the tram, for this he gets (say) 2s.; for the ton of iron ore the miner, perhaps, gets his 5s. In these operations let us see what these men give to the public. The

returns published of the duty of the Cornish engine show that, by the consumption of 1 cwt. of coal, 100,000,000 lbs. of water is raised 1 foot high, the same as at the waterworks, which supply our towns with water. If we examine the results from our enormous steam-power, whether for steamship or manufacturing purposes, we have equally startling results. The same benefits flow from the labour of the miner for the production of the iron; these feed all the great industrial establishments of England. I have seen it stated somewhere that the amount of duty performed by the steam-engine, during the consumption of 1 ton of coal, is equal to the labour of one man for the enormous period of 25 years; and this is given to the world at a rate which banishes the collier from the soil, while the steam-power of England, at the present moment, is equal to the labour of nearly 500,000,000 human beings, or a power equal to the population of the whole earth. We may well, as a nation, be proud of and thankful for our great mineral deposits, of the skilled labour that keeps this vast machine in operation, of the energy and intelligence of those who have risked their capital in developing these mineral resources to bring about such mighty results; but if in obtaining these results we must at the same time assist in banishing our workmen from England, we cannot say much for the short-sighted policy which has brought about this state of affairs. I must now, however, close these remarks until next week's Journal.

FOREIGN MINING AND METALLURGY.

A statistical sketch has just been officially made of the concessions granted for the working of the mineral and metallurgical wealth of France. Among the substances which form the object of concessions there are only two, combustible mineral and iron—with regard to which numerous privileges have been granted. Irrespective of these latter, there exist only 247 concessions of mines of other substances—graphite and bitumen, pyritic and aluminous lands, rock salt, and salt springs, antimony, manganese, lead and blacklead, lead and silver, copper, argentiferous lead, zinc, gold, sulphur, tin, &c. The concessions granted of mines of coal and iron number 490 for the first, and 202 for the second. The concessions of mines of combustibles have a total superficial extent of 5226 square kilometres, and are divided among the following departments:—Loire, Gard, Aveyron, Isère, Hérault, Saône-et-Loire, Basses-Alpes, Nord, Bouches-du-Rhône, Hautes-Alpes, Allier, Pas-de-Calais, Mayenne, Maine-et-Loire, Haute-Loire, Haute-Saône, Var, Puy-de-Dôme, Moselle, Ardèche, Sarthe, Bas-Rhin, Vaulusе, Aude, Creuse, Cantal, Vendée, Vosges, Corrèze, Rhône, Ain, Loire-Inférieure, Drôme, Tarn, Dordogne, Jura, Finistère, Landes, Calvados, Nièvre, Manche, Yonne, Deux-Sèvres, Doubs, Hautes-Pyrénées, and Pyrénées-Orientales. The concessions of mines of iron embrace a total perimeter of 248,764 acres, divided into 31 departments—the Isère, the Pyrénées-Orientales, the Gard, the Moselle, the Saône-et-Loire, the Ardèche, the Aude, the Aveyron, the Doubs, the Loire, the Ain, the Manche, the Nord, the Hérault, the Jura, the Haut-Rhin, the Basses-Pyrénées, the Vosges, the Saône-et-Loire, the Ariège, the Bas-Rhin, the Côte-d'Or, the Corse, the Var, the Creuse, the Corrèze, the Vaucluse, the Puy-de-Dôme, the Allier, the Drôme, and the Haute-Marne. Substances the working of which is submitted to a simple permission are not comprised in this enumeration when they belong to the class of mineral bearings, such as iron minerals worked open to the sky, pyritic earths suitable for conversion into sulphate of iron, and turf, or those which form the object of simple police regulations, such as slate, stone for building purposes, marble, and other analogous substances.

The forgemasters' fair at Besançon has been held this month. It was stated at this rather important gathering that the fine pig of the Franche-Comté could no longer be run off easily, in consequence of the competition of pig from other sources, and of inferior quality. A fall in prices was then decided on, and was fixed at 16s.; the present tariff is consequently 6*l*. 16s. for first quality. The Moselle group acquires every day a greater extension, the erection of new constructions and the establishment of new junctions, are the chief matters spoken of. As regards the establishments now existing, they continue to maintain a good activity, and prices are firm. At St. Dizier, the situation is still a little sluggish. The demand for iron is regular, and sufficiently considerable to maintain activity in the works, but buyers still do not lay in large supplies, but merely order for short periods. Pig is quoted at 4*l*. 12s. to 4*l*. 14s. per ton, without much business being done in it. A third blast-furnace in the Haute-Marne has undertaken the fabrication of pure coke-made pig; this quality is dealt in at 3*l*. 10s. per ton. Annexed are the quantities of iron, pig, and steel imported into France during the first seven months of the current year:—Pig, *en masses*, from England, 12,863 tons; ditto, from Belgium, 19,755 tons; refined pig, called *mazée*, 5 tons; pig of every other kind, 2272 tons; steely pig, 10 tons: total, 34,905 tons. Temporary admissions, 97,841 tons: general total, 132,746 tons. We now pass on to iron. The imports of iron in bars from England in the seven months were 77 tons; from Belgium, 35 tons; and from other sources of supply, 17 tons. The imports of rails from England amounted to 62 tons, from Belgium to 232 tons, and from other sources of supply to nearly ¾ ton. The imports of angle and T iron were 57 tons; of rough iron, 10 tons; of plates, 21 tons; of sheets, 37 tons; of iron wire, 251 tons; and of tinned, coppered, and zinced iron, 385 tons. The temporary admissions of irons amounted to 16,699 tons, and of plates to 6027 tons, making a general total (including the imports of other descriptions of iron) of 23,910 tons. The imports of steel in bars of all kinds amounted to 424 tons; and of rolled, filed, &c., steel, to 382 tons, making a total of 806 tons. A report of the Nantes Chamber of Commerce states that metallurgical industry is represented in the Loire-Inférieure by the forges of the Basse-Indre, and the maritime forges of Nantes, as well as by several works situated in the arrondissement of Chateaubriand. The situation of the two first establishments leaves something to be desired, as well from the diminution of orders as from the importation of important quantities of foreign metals by favour of the system of temporary admissions; thus during the first six months of 1864 the Customs House of Nantes registered the importation of 4569 tons of iron and 1970 tons of cast-iron. These establishments can, nevertheless, the Chamber thinks, sustain a competition with foreign products. It is not, however, the same with works situated in the arrondissement of Chateaubriand; the forges of Moisdon, La Hunaudière, La Prevotière, and the blast-furnaces of La Privière and La Jahottière are stopped; only the blast-furnace of La Poltevinière, which makes pig with Spanish mineral, preserves any activity. The Chamber indicates as indispensable the construction of a railway from Laval to Nantes, *via* Chateaubriand. The workshops of Nantes are in full activity; they delivered in 1863 two iron bridges of a weight of 1200 tons, and in the first half of 1864 a bridge of 800 tons, while the works of a bridge now on hand are also of considerable magnitude. Belgium has made some good "placements" in France; a contract for 500 to 600 tons of plates, two millimetres in thickness, is mentioned. For some time past attention has been devoted to a line of railway projected between St. Dizier and Vassy. The utility of a line between these towns is said to be incontestable, and it is added that its creation would give to the numerous interests of the Blaise the satisfaction which they solicit, and which is on many grounds their due. Various routes have been surveyed by the State and the Eastern of France Company, which would charge itself with the construction and working of the line. The Council-General of the Haute Marne has voted a subvention of 4000*l*. to the line, and an equal amount to another commencing at Chaljndrey and terminating at Neufchateau, *via* the valley of the Meuse. The Council also expressed itself in favour of the creation of a direct junction from the works of the Marne to the collieries of the Mons basin; of this line a Belgian company solicits a concession at its own risks and perils. The Council further urged the prompt completion of the canal from Vitry to St. Dizier, and expressed a hope that the Government would shortly grant its extension to the heart of the department. The Council devoted some attention to the revision of the law of April 21, 1810, on mines proposed to the *Corps Législatif* during the past session; it expressed an opinion that Art. 2 might be suppressed without inconvenience.

The situation of metallurgical industry remains very good in Belgium; activity is sustained in the works, and the orders received are numerous. If prices do not advance it is because the engagements undertaken by the various establishments prevent them from accepting orders the execution of which is prescribed within a brief period. The majority of purchasers, on the other hand, offer only short date orders. A letter from Charleroi says:—"The works of our basin have had many contracts for rails to execute, and there still remain a great number to complete, but the means of fabrication are so powerful that an astonishing amount of work has been executed in a few months. Thus some establishments, in order to maintain their stock of orders at a reassuring level, are seeking affairs a little, especially affairs in rails, although at the same time they sustain prices with firmness. Merchants' irons are reviving before the close of the dead season; according to all appearances both the internal and external trade reserve important orders. Prices do not vary; thus No. 1 makes 7*l*. to 7*l*. 4s.; No. 2, 7*l*. 12s. to 7*l*. 16s.; No. 3, 8*l*. 4s. to 8*l*. 8s.; and No. 4, 8*l*. 16s. to 9*l*. per ton. Affairs in casting-pig on home account are quiet; nevertheless, a good current of business is maintained, in consequence of the moderation of the prices asked by our forgemasters. Business has been done at 3*l*. 16s. and 3*l*. 14s. per ton, according to quality. Refining moves on better; at the same time, prices have not varied for several months past; they range, according to quality, at 3*l*. 8s. to 3*l*. 10s. per ton. Plates are for the moment the metallurgical product most sought after, and for which there has been the most animation between buyers and sellers. An English house has obtained the last adjudication of rails in Holland; only one Belgian firm (that of MM. de Doriodot Frères) submitted a tender. A rupture took place recently between one of our great workers of rich coal and our forgemasters on the occasion of an advance, which the latter would not accept. This difference has now terminated, and relations are re-established. The Trieu Kaisin has concluded some affairs in coal at 10s. per ton." The ordinary and general meeting of the Providence Forges Company has just been held for 1864. A report was presented on the exercise which closed June 30, 1864, in which the regular and satisfactory progress of the works was indicated. Their production in the 12 months ending June 30 attained the very considerable total of 51,123 tons of pig and 33,848 tons of rolled iron, under the form of merchants' iron, girders, special irons, and plates. The nett profit, after deducting all general expenses, redemption of buildings, and bad debts, amounted during the past exercise to 32,279*l*., which admitted of the distribution of 4*l*. per share, while 6061*l*. was carried to the reserve. The company having its principal seat of operations in France has participated in the depression under which the metallurgical industry of that country has languished; and the results obtained are all the more remarkable. The administration is still actively applying itself to the improvement of the means of fabrication.

The position of copper on the foreign markets has slightly improved. Chilian has found purchasers at Havre. For a lot of 25 tons disposable, 89*l*. per ton, Paris conditions, has been paid; the last advices from Chili report a great diminution in the exports from that country. The Paris market has been quiet, and prices have remained without change. The German markets are distinguished by a good tone; at Hamburg little has been done of late, but in consequence of the smallness of supplies, holders remain firm at present rates. On the Berlin market large quantities of Russian, of good quality, have found purchasers at high rates; other sorts are in less demand, but are, nevertheless, very firm. At Cologne and Stettin there have been no variations. A slight amelioration has been noted in tin. The more or less forced sales recently made have ceased. According to advices from Amsterdam, the lowest price to which Banca tin has fallen during the past month has been 60 fls.; and at the last dates the article would find purchasers at Amsterdam as well as at Rotterdam, at 62 fls. to 62½ fls. The state of the stock was as follows, August 31, as compared with the corresponding date of 1863 and 1862:—

	1864.	1863.	1862.
Stock July 30 ..... Ingots	154,420	129,853	136,034
Deliveries in August	55,520	29,764	30,637
Stock August 31	98,900	100,089	105,406

The arrivals for the Society of Commerce were 17,352 ingots, against 21,997 ingots in 1863, and 27,632 ingots in 1862. The Paris market has been quiet, Banca having made 108*l*.; Detroit, 106*l*.; and English, 106*l*. per ton. On the various secondary markets the article has only given rise to very reduced transactions, limited to the requirements of consumption; former rates are, however, generally maintained, and increased animation is anticipated, if the improvement displayed on the English and Dutch markets is sustained. There is no change to note in the position of lead, affairs being confined to the execution of small orders. The Paris market has been quiet, but former rates have been maintained. At Hamburg, lead has been in feeble demand; the Berlin market has been more active; but at Cologne, there has been but little enquiry for the article. A diminished activity in the demand for lead has been observed in the principal markets. At Paris, little business has been done; rough Silesian is quoted by continuation at 25*l*. 8s. per ton (warrants). At Hamburg, the article remains in a feeble state owing to less favourable advices from abroad.

SAFETY LAMPS.

According to the invention of Mr. James Rees, of Merthyr Tydvil, the lamp is provided with two cylinders of wire gauze instead of a single cylinder, as is usual. The said cylinders are concentric with each other and with the flame. He fixes at the top of each of the said wire-gauze cylinders a perforated disc of metal, for the purpose of protecting the tops of the said cylinders from the direct action of the heat from the flame of the lamp. Both the cylinders described are fixed by screwing to the top of the body or oil reservoir of the lamp. The oil reservoir is provided with a false bottom, a short distance above the true bottom; the two chambers thus formed communicate with each other by an opening in the false bottom. Over the said opening and extending through the upper chamber, or oil reservoir, is a tube, the said tube being perforated with holes from the false bottom upwards to about half the length of the said tube. A rod passing through the wire-gauze cylinders of the lamp enters the said tube, its end screwing into the false bottom. Communication between the two chambers is thereby cut off. When, however, the rod is screwed out of the opening in the false bottom the oil in the upper chamber, or oil reservoir, passes through the perforated tube and opening in the false bottom into the lower chamber, from whence it escapes by a number of openings in the said lower chamber. In using a lamp containing his improvements the rod before described is passed through the wire-gauze cylinders and its end screwed into the opening in the false bottom. The upper chamber, or oil reservoir, is then filled with oil in the usual manner, and the lamp is ready for use. Before the wire-gauze cylinders surrounding the flame can be removed to obtain access to the said flame it is necessary that the rod before mentioned should be unscrewed from the opening in the false bottom of the oil reservoir. Hence if the miner should remove the said rod, communication between the oil reservoir and lower chamber will be be established, and oil will pass rapidly from the said oil reservoir to the lower chamber. By the time the miner has removed the wire-gauze cylinders encircling the flame, by unscrewing them from the body of the lamp, the whole of the oil will have escaped from the oil reservoir, and the lamp wick being no longer supplied with oil, the flame will be extinguished in a few minutes.

Mr. Rees likewise proposes another form of lamp, in which the flame is protected, partly by glass and partly by wire-gauze. He protects the flame of the lamp at front by two concentric curved or semi-cylindrical glasses, and at back by wire-gauze. At the back of the flame is a reflector. The tops of both the compartments formed by the curved glasses are covered with wire-gauze, that covering the outer compartment being capable of removal when necessary from the lamp case. That part of the wire-gauze covering the back of the inner compartment is capable of sliding vertically, so as to permit of the lighting of the lamp. This sliding wire-gauze door, and the cover closing the top of the outer compartment in front of the lamp, are so constructed that the former cannot be raised until the latter has been removed from the lamp.

Mr. Rees applies a similar arrangement to the oil reservoir as described in referring to the gauze lamp, the upper end of the rod which closes the opening in the oil reservoir being passed through the cover closing the outer compartment of the lamp, so that the said rod must be removed before the said cover can be lifted from the case to obtain access to the flame through the door at the back of the lamp. By the removal of the rod oil escapes from the reservoir in the manner before explained, and indicates that the lamp has been tampered with. By employing two concentric curved glasses at front of the lamp, should one be broken, the flame is still protected by the other. The trigger by which the wick of the lamp is raised is worked from the back of the lamp, and the trimmer by which the wick is trimmed is also worked from the back of the lamp.

NEW INVENTIONS.

PROVISIONAL PROTECTION for six months has been granted for the following:—

F. M. E. MARTIN, Paris.—Improvements in the manufacture of cast steel. Aug. 15.

W. T. LOGIN, India.—Improvements in the apparatus for raising and discharging water. Aug. 24.

[and other blasting operations. Aug. 25.

A. DUMAS, France.—Improved apparatus for lighting and for firing charges in mines.

R. HILL, Birmingham.—Improvements in manufacture of iron and steel. Aug. 26.

F. W. ARMITAGE, Barnsley, York.—Improvements in machinery for cutting or working coal or other minerals. Aug. 29.

J. LONES, West Bromwich, Stafford.—Improvements in coating iron and steel. Aug. 30.

LETTERS PATENT have been issued for the following:—

B. P. STOCKMAN, Westminster.—Improvements in constructing sea and river embankment walls, piers, and other structures, wholly or partly immersed in water. March 3.

F. WALTON, Staines.—Improvements in machinery for raising water and other liquids. March 10.

[March 29.

H. SMITH, Lancaster.—Improvements in machinery for breaking stones and minerals.

E. STOTT, Chester.—Improvements in the manufacture of rails for railways. April 1.

LIST OF SPECIFICATIONS published during the week:—

Manufacture of peat charcoal, 1s.; puddling furnaces, 10d.; imparting motion to shafts, 1s.; safety-lamps, 4d.; slide valves, 6d. L. DE FONTAINEMOREAU.

PNEUMATIC ELEVATOR FOR MINE SHAFTS—ROPES AND HAULING MACHINERY SUPERSEDED.—With a view entirely to obviate the inconvenience and danger resulting from the breakage of ropes and chains, Messrs. Alison and Shaw propose an invention for dispensing with them altogether, and employing in their place an apparatus somewhat similar in form to that introduced by the Pneumatic Despatch Company, but which is worked by pressure instead of exhaustion. The inventors state that, in their improved elevators, which are equally applicable for raising either water or minerals from collieries and mines, a cylinder or tube is placed in the shaft, which rises a few feet above the top of the shaft, and reaches a few feet below the bottom of the mine. This cylinder is made of malleable or cast-iron, or other suitable metal or material, and of a diameter according to the weight of minerals, water, or other substances to be lifted. In this cylinder or tube a double-headed piston works, and between the two heads of the piston a fixed or movable receiver or barrel, or wagon is placed, which holds the mineral or water to be raised. An air-pump, worked by a steam-engine or water-wheel, or other power, is used for forcing air down the shaft in a tube, which air passes into the cylinder below the under piston-head. Forcing only may be used, but exhausting and forcing may be used in conjunction. When the load is put in at the bottom, a valve is opened, so that the air is introduced under the piston, which, with its load, then rises to the top. On arriving at the top the load is removed, and on an escape-valve at the bottom being opened, the piston descends, and the air which escapes ventilates the mine. This improved ventilator not only acts as an elevator and ventilator, but provides a safe and expeditious mode of conveying workmen up and down the shaft.

WINDING APPARATUS FOR COLLIERIES.—An invention has been patented by Messrs. Denton and Whitaker, of Leeds, which relates to certain improvements in the apparatus used for winding cages in mines and collieries, the objects being to prevent the descent of the cage by the accidental breaking of the rope, and to prevent accident from over-winding, the methods being applicable also to mill hoists and other similar purposes. The chains or ropes coupled to the main chain or rope, and supporting the cage, are attached to two catches, working loose on studs fixed to each end of the upper part of the cage, which is drawn up and let down the pit by aid of the upright conductor. The catches have curved slots cut in them, such slot ways being struck from the centres of the studs; each slot contains a curved block of less length than the slot, so that when the suspending chains are tightened by the weight of the cage the catches will turn on their centres, the points of the catches opening or descending until the bottom of each slot comes in contact with the bottom of its block, four of which form the bearing of the cage. A spring is bolted to each block ready to bring the points of the catches back to the conductor; when the rope slackens or breaks, these springs act upon or under projecting headed studs near the points of the catches. The heads keep the springs in their places. Curved plates (bolted to the back of the blocks with the springs between the two) serve as parallel guides for the catches. The points or edges of the catches should be notched or serrated, in order to enable them to bite or hold better. Each pair of catches is connected by a bolt or stretcher, to prevent their impinging on the cage by the oblique pull of the chains. To prevent accidents from over-winding they employ a C link, with the bend or hook very strong; a guard prevents the ring of the rope from slipping off the hook. The guard has two snecks, over which two catches drop to keep the guard in position. The catches are held down by two springs bearing on the studs, the ring and guard being jointed at the bottom. The two catches are coupled together by a tail piece inserted between them and rivetted thereto, so that should the cage be over-wound, before it can reach the pulley the tail piece will come in contact with a cross beam fixed for the purpose, and turning on a pivot set in the link, the catches will be lifted from the sneck, thereby removing the impediment to the separation of the guard from the link, which, having the shoulder on it above the tail piece, will be thrown backwards, so that the rope ring must slip out and leave the catches and the cage behind, then the catches in the cage itself being released from the pull of the rope spring into action against the conductor, and prevent the descent of the cage.

IMPROVED FURNACES.—An improved form of furnace, for melting, puddling, re-heating, and for raising steam, has been lately introduced into a number of large works, where it promises to effect an important saving in fuel and in fire-bars; as well as improving the quality of iron, wherever employed in iron-making. It is the invention of Mr. E. B. Wilson, formerly the proprietor of the Railway Foundry, Leeds, and who for the last few years has given his whole time to a series of inventions, likely to effect very important results in the manufacture of iron. In Mr. Wilson's new furnace the draught of air is downward and through the fresh coal. The gas from the coal is regularly and continuously distilled and burnt by a regulated admission of air into the gas-chamber. After traversing the gas-chamber, the products of combustion descend into an underground flue leading to the chimney. Messrs. De Bergue and Co., of Manchester, have erected furnaces upon this plan, both for re-heating and for raising steam; Mr. H. S. Blackwell, of Dudley, has applied it to puddling; Mr. Moreland, of Old-street, St. Luke's, London, has it at work for heating rivet rods for a large rivet-making machine; and Mr. Imray, of the Bridge-road, Lambeth, is employing it for melting. At Messrs. De Bergue's, and at Mr. Moreland's, where the furnace has been six months at work, the consumption of coal is 25 cwts. only per week for heating nearly 10 tons of iron, the furnace being kept hot night and day, although worked only in the day time. The "heat" is all that could be wished, the saving of coal is remarkable, the combustion of the fuel is perfect, and, therefore, no smoke is produced, while the furnace radiates very little heat, so that were it not seen its presence would hardly be known. There is a great advantage in the complete exclusion of air beyond that actually required for combustion in the furnace, inasmuch as the iron under treatment is not subjected to the action of free oxygen. Mr. Wilson's new furnace is being rapidly introduced, and we shall have occasion, therefore, to refer to it again.—*Engineer*.

IMPROVED COMPOSITION IRON.—Mr. Wm. M. Arnold, of New York, has secured a patent, by which he claims—"Mixing copper, tin, and zinc, using borax as a flux, with common iron, in about the proportions and in the manner substantially as described, bearing in mind that the relative increase by any common multiplier of the ingredients of copper, tin, and zinc will relatively increase my purposes and objects in making the said composition."

Royal School of Mines.

ROYAL SCHOOL OF MINES.
DIRECTOR—Sir RODERICK IMPEY MURCHISON, K.C.B., F.R.S., &c.

During the Session 1864-5, which will commence on the 3d of October, the following COURSES of LECTURES and PRACTICAL DEMONSTRATIONS will be given:—

1.—CHEMISTRY ..... By A. W. HOFMANN, LL.D., F.R.S., &c.
2.—METALLURGY ..... By JOHN PERCY, M.A., F.R.S.
3.—NATURAL HISTORY .... By T. H. HUXLEY, F.R.S.
4.—MINERALOGY .....
5.—MINING ..... } By WARINGTON W. SMYTH, M.A., F.R.S.
6.—GEOLOGY ..... By A. C. RAMSAY, F.R.S.
7.—APPLIED MECHANICS .. By ROBERT WILLIS, M.A., F.R.S.
8.—PHYSICS ..... By JOHN TYNDALL, F.R.S.

Instruction in Mechanical Drawing, by Rev. J. HAYTHORNE EDGAR, M.A.

The fee for students desirous of becoming associates is £30 in one sum, on entrance, or two annual payments of £20, exclusive of the laboratories.

Pupils are received in the Royal College of Chemistry (the laboratory of the school), under the direction of Dr. Hofmann, and in the Metallurgical Laboratory, under the direction of Dr. Percy.

Tickets to separate courses of lectures are issued, at £3 and £4 each.

Officers in the Queen's Service, Her Majesty's Consuls, acting mining Agents and Managers, may obtain tickets at reduced prices.

Certificated schoolmasters, pupil teachers, and others engaged in education, are also admitted to the lectures at reduced fees.

His Royal Highness the Prince of Wales has granted two scholarships, and several others have also been established.

For a prospectus and information, apply at the Museum of Practical Geology, Jermyn-street, London, S.W. TRENHAM REEKS, Registrar.

GRANITE CURB AND SETS, AND YORK PAVEMENT.—The West Ham Local Board of Health are PREPARED to RECEIVE TENDERS from parties who may be willing to DELIVER any of these MATERIALS, either in the Victoria (London) Docks, or on such wharves as may be named on the River Lea.

Forms of tender, with any particulars and information required, may be obtained by application to Mr. MARSHALL, the surveyor to the Board, at his office, in Rokeby House, Stratford, E.; and the tenders are to be sent, addressed to me, and endorsed "Tender for Pavement," &c., on or before Monday, the 10th October next.

By order of the Board, CHAS. WILSON, Clerk to the Board.
Rokeby House, Stratford, September 15, 1864.

TO CAPITALISTS—SILVER MINES IN MEXICO.—WANTED, EIGHT THOUSAND POUNDS, to EXTEND the WORKING of these MINES, to be repaid £2000 per annum, exclusive of interest. The proprietors will give exceedingly liberal terms, satisfactory security, and will pay the passage out to Mexico to a really *bona fide* person, so as to enable him to satisfy himself upon every point previous to advancing the money.—Further particulars will be forwarded to principals or their solicitors upon application to Mr. J. M. ELLIOTT, accountant, 1, New Brown-street, Manchester.

TO IRONMASTERS AND MANAGERS—ROLL TURNER.—WANTED, a SITUATION, by an EXPERIENCED WORKMAN. Has been used to all kinds of rails rolled from Bessemer's steel, T and angle sections. Can produce section sheet. Would have no objection to take to the management of mills. Five years' good character from one of the principal firms in Yorkshire.—Address, "R. T.," Box, Post-office, Sheffield.

TO IRON AND COAL MASTERS.—A MINING ENGINEER, of 20 years' experience in the management of ironworks and collieries, both in Britain and on the Continent, is OPEN to an ENGAGEMENT, either in Britain or abroad. Has been accustomed to explore and report on mineral property. First-class testimonials.—Address, "Mining Engineer," MINING JOURNAL office, 26, Fleet-street, London, E.C.

TO COLLIERY OR MINE PROPRIETORS.—WANTED TO PURCHASE, a LIFT of PUMPS, with working barrel, 18 to 20 in. diameter, and 30 fms. long.—Apply, with statement of particulars, to Messrs. WOODHOUSE and JEFFCOCK, civil and mining engineers, Derby.

TO MINING COMPANIES AND OTHERS.—An OFFER WANTED for ONE of BLAKE'S PATENT STONE BREAKING MACHINES, made by Marsden, of Leeds, six months ago, and never having been used. It cost £180, delivered in Leeds, and is now near St. Austell, in Cornwall.—Apply to Mr. CRAVEN, 6, East Parade, Leeds.

TO MINERS.—WANTED, a MASTER MINER, of skill and means, to UNDERTAKE the DRIVING of a HEADING THREE THOUSAND YARDS in LENGTH, through rock.—For particulars, apply to Messrs. GREENE and KING, 83, Middle Abbey-street, Dublin.

TO BE SOLD, the LEASE of an excellent BARYTES MINE, conveniently situated, near to BANTRY BAY, COUNTY CORK. The barytes is of good quality, and the vein 6 ft. wide and 40 ft. breast, laid dry by the present lessee, who has driven a horse level up to it, so that large quantities can be produced and shipped at a very low price. Good facilities for manufacturing by water-power are available in the immediate neighbourhood.—For further particulars, apply to Mr. SAML. WESTON, Clarendon-place, Leeds; or to Mr. JAMES SAMPSON, Schull, County Cork.

ON SALE, a HORIZONTAL HIGH PRESSURE STEAM ENGINE, 17 in. cylinder, 3 ft. stroke, reversing gear, fly-wheel, force pump, two drums, two winding pulleys, and everything complete for winding and pumping purposes. Also, a SECOND HAND BOILER, as good as new, 17 ft. long, 6 ft. diameter, with two flues through, fitted with mountings, all complete for immediate use. Also, TWO complete SETS of PUMPS, 20 yards long each, 8 and 9 in. diameter.—Apply to Mr. W. P. WILLIAMS, 29, Bridge-street, Carnarvon, North Wales.

FOR SALE, 19½ in. FORCING PUMP, 14 in. LIFTING PUMP, HAND PUMPS, pumping crank, lifting screw, pit chain, and other colliery material.—Apply to Mr. JOHN FARLER, Nailsea, near Bristol.

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Fountney-place Laurence Fountney-hill Cannon-street E.C.

CONNORREE MINING COMPANY (LIMITED).—At an ORDINARY GENERAL MEETING of the above company, held this day, JOHN FRANCIS WALLER, Esq., LL.D., in the chair,

The following resolutions were passed, viz.:—

Resolved,—That the report and statement of accounts now read be received, and that the same be printed for distribution amongst the shareholders.

Resolved,—That John Francis Waller, Esq., LL.D., and Edward Fottrell, Esq., be re-elected directors of this company.

Resolved,—That James West and John Fry, Esqs., be the auditors for the ensuing year, and that a sum of £10 be paid to the said auditors for each half-year's audit.

Resolved,—That the thanks of this meeting be given to Capt. Bishop for his judicious and proper management of the mines, and also to the secretary, Mr. Dedrickson, for his exertions in behalf of the company.

Resolved,—That the thanks of this meeting be given to J. F. Waller, LL.D., for his impartial and proper conduct in the chair this day, and to the directors for their attention to the interests of the company. GEORGE DEDRICKSON, Sec.
46, Dame-street, Dublin, September 10, 1864.

THE CAPE COPPER MINING COMPANY (LIMITED).—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders in this company will be HELD at the London Tavern, Bishopsgate-street, in the City of London, on FRIDAY, the 30th day of September instant, at Two o'clock in the afternoon, to receive the statements of accounts, embracing the operations in the colony to 31st December last, with the auditors' report upon the same.

By order of the Board, W. G. WILLIAMS, Sec.
6, Queen-street-place, London, September 13, 1864.

FORTUNE COPPER MINING COMPANY OF WESTERN AUSTRALIA (LIMITED).—Notice is hereby given, that the SECOND ANNUAL GENERAL MEETING of the Fortune Copper Mining Company of Western Australia (Limited) will be HELD at the offices of the company, No. 9, Gracechurch-street, London, E.C., on WEDNESDAY, the 21st inst., at Twelve o'clock precisely.

E. NICHOLAS, Sec.

MINING OFFICES, MANCHESTER.

MESSRS. HARVEY AND CO., MINING ENGINEERS, AGENTS, AND SHAREDEALERS, CLARENCE CHAMBERS, MANCHESTER, are at all times in a position to deal in all the market Dividend and Progressive Mine shares, and also to advise on all mining matters, being practically acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall.

Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Forwarded gratis on application.

MESSRS. ROBERTS AND CO., 87, LONDON WALL, E.C., have selected a LIST of DIVIDEND and PROGRESSIVE MINES, which they can strongly recommend. Also, Bank, Railway, and other shares.

Commission, 1¼ per cent.

Office of ROBERTS and Co.'s "Price List, and Stock and Share Reporter," price 3d.

MESSRS. ROBERTS AND CO.'S PRICE LIST AND STOCK AND SHARE REPORTER contains Reports of Mines, Notices of Meetings, Plans of Mining Districts (showing the position of progressive mines in reference to those returning large profits), Railway Meetings, Joint-Stock Companies Intelligence, and Advice as to the Purchase and Sale of Stock.—87, London-wall, E.C.

CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN, via SHREWSBURY, has had upwards of 20 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Residing in the centre of the CARDIGANSHIRE MINING DISTRICT, and in close proximity to those of MERIONETHSHIRE and MONTGOMERYSHIRE, he OFFERS HIS SERVICES to SURVEY and REPORT UPON ANY MINE.

MR. BRENTON SYMONS, MINING ENGINEER AND SURVEYOR, can PROCURE MINING SETTS in ANY DISTRICT in CORNWALL or DEVON.—18, Hatton-garden, E.C.

MR. BRENTON SYMONS INSPECTS and REPORTS on ANY MINERAL PROPERTY. In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C.

CHARLES DAVEY AND CO.
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE.

MINES AND MINING PROPERTY TO BE SOLD.—

The ENTIRE SILVER-LEAD MINING ESTABLISHMENT in UNDER MUNSTERTHAL, near STAUFEN, 15 to 18 miles from Freiburg, and near the Belchen, consisting of THREE MINES, the SCHINDLER, TEUFELSGRUND, and the HERRNWALD, together with all that belong thereto, such as BUILDINGS, MACHINES, ARRANGEMENTS, PROPERTIES, and ESTATES, will be SOLD AT AUCTION, on the 22d instant, at the company's offices, in Münsterthal, near the Hof-Hotel, in convenient lots, if not previously disposed of by private contract.

At the SCHINDLER, a drawing machine house, DRAWING MACHINE, and WATER WHEEL, 40 ft. diameter by 3½ ft. breast; two wire-ropes, chains and kibbles; 2 shaft pulleys, 10 ft. diameter; a WATER WHEEL for pumping, 40 ft. high by 2 ft. breast, with 2 bobs, iron rods, and pulleys at surface; 324 ft. 7 in. pump work in the shaft, with iron and wood rods; a 13 in. repeating plunger, with rods and bobs complete; 1 capstan, with hemp rope, shears and pulleys; 3000 ft. bridge rails, 53 lbs. per foot, and 2 tram wagons.

At the TEUFELSGRUND, dressing-floors, 2 round picking tables, with 2 iron wire cylinders; ONE WATER WHEEL, 30 ft. diameter: TWO small ditto, each 5 ft. high; 1 round buddle, and several jigging machines; a large building of stone and wood, containing a good crusher, with rolls 2¼ ft. diameter, and WATER WHEEL 30 ft. high by 2¼ ft. wide; 2 raft wheels, with brass sieves; several jigging machines, 2 round buddles and slime pits; one new house near the crusher, consisting of a dwelling for an agent, smithy, oil and iron stores, ONE WATER WHEEL for blowing, 2 smiths' bellows, 2 anvils, and a large quantity of smiths' and mining tools; meadow and arable land, about 1½ acre; a large massive building of stone, for stamps and dressing-floors and agent's dwelling; a WATER WHEEL 18 ft. high, for 15 heads of stamps; one 14 ft. high, for 3 shaking tables; and one 5 ft. high, for 5 washing tables; dressing-floors, with streaks and slime pits; meadow near the stamps, about 1¾ acre; several dials and levelling instruments, of various kinds.

The SMELTING WORKS consist of one large smelting house, with FURNACE and REFINING OVEN, 2 bellows, with WATER WHEEL 12 ft. high; an assaying office, laboratory, and lead magazine: a stamps, with WATER WHEEL 10 ft. high; a roasting house of wood, a dwelling-house for the manager, and a magazine for litharge, &c.; 2 coal houses, built of stone and wood; a dwelling-house, ore house, and stables; also, a large house between the river and main road, arranged with barn, stables, and coach-house; meadow and garden adjoining, about 3 acres.

The stamps and the smelting works are well situated for factories, where, instead of two water-wheels at the stamps (as at present) of 18 and 14 ft., one of 33 ft. high can be put in; as also at the smelting works, the two of 12 and 10 ft. might be replaced by one of 23 ft. diameter.

Any further particulars may be obtained of Capt. RICHARDS, and Mr. KLEINBRODT, at the mines, in Münsterthal; or of W. J. DUNSFORD, Esq., 9 Broad-street-buildings, London, E.C.

Münsterthal, near Staufen, in Baden, Grand Duchy of Baden, September 3, 1864.

SWANSEA COPPER ORE WHARVES.

TO IMPORTERS OF FOREIGN COPPER, LEAD, AND CALAMINE ORE.

Swansea, July 1, 1864.

GENTLEMEN,—We beg to inform you that, in consequence of the retirement of Messrs. W. and J. M. Williams from the copper ore trade, which they have carried on here for so many years past, we have resolved to enter upon that business, and for which purpose we have secured most eligible wharves, on the west side of the North Float, where vessels drawing 20 ft. of water can get alongside at all times. These wharves are now covered in, the floors being made of concrete to prevent waste of the ore. A powerful steam crusher has lately been erected on the premises, and is now in working order.

The business we purpose carrying on is that of COPPER ORE WHARFINGERS, combined with metal and other general agencies, which will be managed by our Mr. Thomas Elford, who for 20 years has filled an important situation under Messrs. Williams, Foster, and Co., and for the last eight years has had the entire management of their large copper smelting works, and copper and metal rolling mills, in this locality, as well as the copper ore business of Messrs. W. and J. M. Williams, which we trust will be a sufficient guarantee to our friends that any business they may entrust to our care will be conducted with the most scrupulous attention to secure the best results for their interests.

In consequence of the large number of very extensive Copper smelting works concentrated in this immediate locality, this market affords greater competition for ore than perhaps any other in the world, there being now no less than sixteen distinct Companies competing for ores sold at the public ticketing, every two or three weeks. There is also a good demand for lead and zinc, or calamine ores, several large lead and spelter works having been established in this district for some time past, and new ones are in course of erection.

Soliciting a share of your consignments of ore, regulus, and slab copper to this port, as well as a share of any general business you may have to transact in this quarter,

We remain, Gentlemen, your obedient servants,

ELFORD, WILLIAMS, AND CO.

REFERENCES:—Messrs. Williams, Foster, and Co., London and Liverpool; Messrs. Williams, Harvey, and Co., London and Liverpool; the Glamorganshire Banking Company, Swansea; Messrs. Alex. Bell and Sons, No. 8, Finch-lane, London; Mons. Armand de Lacombe, Madrid.

THE KILCROHANE AND GURTNAKILLA SLATE AND SLAB COMPANY (LIMITED).

Capital £40,000, in 10,000 shares of £4 each.

Deposit, 10s. per share on application, and 10s. per share on allotment.

Registered under the Companies Act.

DIRECTORS

Capt. WILLIAM B. BEATTY, Argyle-road, Kensington, W.
CAPEL COAPE, Esq., Pryor's Bank, Fulham.
GEORGE BEDFORD, Esq., Loughborough-park, Brixton.
WILLIAM JOHNS, Esq., Junior Carlton Club, Regent-street.
Major-General MASON, South Parade, Trafalgar-square, S.W.
ALFRED MELHADO, Esq., Princes-square, Kensington.
JAMES TURRELL, Esq., Ramsgate.

BANKERS—Messrs. Olding, Osborne, and Co., 29, Clement's-lane, Lombard-street.
BROKERS—Messrs. Aaris and Co., 75, Old Broad-street.
SECRETARY (pro tem.)—J. Nightingale, Esq.
OFFICES,—No. 16, LUDGATE STREET, LONDON.

ABRIDGED PROSPECTUS.

This company is formed for the purpose of purchasing the leases of and extending the works of a very valuable slate and slab quarry, now in full operation and making returns.

Full prospectuses, with reports, also forms of application for shares, can be obtained from the brokers or secretary, and samples of the slates and slabs can be seen at the offices of the company.

THE KILCROHANE AND GURTNAKILLA SLATE AND SLAB COMPANY (LIMITED).

—Notice is hereby given, that NO FURTHER APPLICATIONS FOR SHARES in this company will be RECEIVED AFTER SATURDAY, Sept. 24.

By order, J. NIGHTINGALE, Sec. pro tem.

THE CENTRAL SNAILBEACH MINING COMPANY (LIMITED).

Capital £40,000, in 40,000 shares of £1 each.

2s. 6d. per share with the application, and 17s. 6d. payable on allotment.

DIRECTORS.

JOB TAYLOR, Dudley.
EDWARD HENRY LOWE, Shrewsbury.
GEORGE JOSEPH ENGLAND, Dudley.
The Rev. THOMPSON STONEHAM, Ketley.
WILLIAM PEARSON, Stourbridge.
THOMAS PROCTOR, Moat Hall, Shrewsbury.

BANKERS—Messrs. Rocke, Eyton, Campbell, and Bayley, Shrewsbury.
SOLICITOR AND SECRETARY—S. Harley Kough, Shrewsbury and Church Stretton.
REGISTERED OFFICES,—SWAN HILL, SHREWSBURY.

The company's extensive sett, on the run of the champion and other lodes, adjoins the western boundary of the Snailbeach Mine, in Shropshire, long celebrated for its immense and increasing returns of lead ore.

A continuation of the Snailbeach champion lode is that on which this company recently commenced sinking a winze, now 8 yards below the 124 yard level, in which there is a leader of pure lead, exceeding 3 inches in width.

As the winze deepens the lead increases, and there is every reason to believe that when this lode is fully developed the mine will prove as rich as its neighbour—the Snailbeach.

The capital was £10,000, of which nearly £8000 were subscribed.

The workings are carried on judiciously and with vigour; but the company, having an offer of a great addition to their sett, and determining to deepen their mine, agreed on 29th July, 1864, to increase their capital to £40,000, issuing shares as the prospects and requirements of the mine justify.

The public are invited to subscribe for a limited number of shares, while such for a short period remain at par.

Specimens of the ore, as also photographs of the sett and neighbourhood, can be inspected at the offices of the *Mining Journal*, 26, Fleet-street, London, E.C.; in Manchester, at 44, Spring-gardens; in Birmingham, at the offices of Rylands' *Iron Trade Circular*, 53, Union-passage, and those of the *Midland Counties Herald*; and of the company, Swan-hill, Shrewsbury, where early applications for shares must be addressed to the secretary, who will forward reports and afford every information.

BRITISH AND FOREIGN INVESTMENT.—

MR. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION of BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS of BRITISH and FOREIGN STOCK.

Mr. SPARGO has for sale shares in English mines paying from 10 to 20 per cent. upon the present price, in bi-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.

Mr. SPARGO gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will, at all times give the best advice as to investment in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.

Mr. SPARGO has published the following works, viz.:—

Statistics and Observations upon the Mines of Cornwall,		1859, price 2s. 6d.
Ditto	ditto	1860, price 2s. 6d.
Ditto	ditto	1862, price 5s.
Ditto	ditto	1864, price 5s.

Physical, Geological, and Parish Map of Cornwall. Scale, three miles to an inch. Printed in three colours, showing distinctly the mining districts, the height of the hills, &c. Price 10s. 6d., on cloth and rollers.

Geological maps of the various mining districts, showing the boundary line of each mine, with the lodes, cross-courses, and elvan courses by which it is traversed. Price 2s. 6d. each.

A Model, or Relief, map of Cornwall (6 ft. 6 in. by 5 ft.), presenting the names of every town and village, as also every characteristic point of the county. Price £5 5s.

Dividends received, calls paid, and all orders promply negociated.

Commission 1¼ per cent.

Mr. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.

Bankers: Bank of London, and the Metropolitan and Provincial Bank (Limited).

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the DULTA TIN MINING COMPANY (LIMITED).—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on Tuesday, the 20th day of September inst., at Twelve o'clock at noon, at the Dulta Tin Mine, in the parish of St. Dennis, within the said Stannaries, either together or in lots, the MINE SETT or GRANT of the said company, and the undermentioned MINING MACHINERY and MATERIALS, viz.:—

ONE 20 in. cylinder STEAM ENGINE, 4½ ft. stroke, 7 tons BOILER, 12 heads stamps attached, with fly-wheel and connections complete.

ONE 23 in. cylinder ROTARY STEAM ENGINE, with 6¼ tons BOILER, not erected.

12 ft. WATER WHEEL, 2 ft. breast, with 3 heads stamps attached; 30 fms. 9 in. lift complete, shears 55 ft. high, capstan with oak axle, horse whim, 2 balance bobs, about 70 fms. flat rods, capstan chain, whim chain, kibbles, pulleys, about 25 fms. launders, 30 fms. ladders, wood roofs to four large sheds, lot of new and old timber and plank, round and other buddles, tin floors, racks, sieves, trunking machine, stamps, strakes, screw stock, taps and screws, grindstone and frame, 4¾ in. vice, anvil, 34 in. smiths' bellows, large iron beam, scales and stand, smiths and miners' tools, carpenters' bench, new wood cistern, 11 barrows, lot of building stone, slate and brick, a quantity of tallow, hemp, leather, oil, grease and tar, and about 4 tons of coals, and the account-house furniture, and a variety of other materials and effects in general use in mines.

Further particulars may be had on application to the officer in possession, or to—

Messrs. HODGE, HOCKIN, AND MARRACK, Solicitors, Truro

Dated Registrar's Office, Truro, September 6, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the SOUTH CLIFFORD UNITED MINING COMPANY.—All CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE their DEBTS or CLAIMS at the Registrar's Office, Truro, on Wednesday, the 28th day of September instant, at Eleven o'clock in the forenoon, or in default thereof they will be excluded from the benefit of any distribution made before such proof; and for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons), they are to send affidavits of their several DEBTS or CLAIMS to the Register of the said Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Judge, Justice, or any Commissioner of one of the Superior Courts, lawfully authorised to take and receive affidavits and affirmations.

WILLIAM MICHELL,
Registrar of the above-named Court, Truro, Cornwall.

Dated this 15th day of September, 1864.

In Chancery.

VALUABLE AND IMPORTANT MINING ESTATE AND FARM.

MR. JOSEPH COOKSEY WILL SELL, BY AUCTION (pursuant to a decree of the High Court of Chancery made in a cause Lloyd *v.* Pearson, and with the approbation of the Master of the Rolls), at the Hen and Chickens Hotel, Birmingham, on Thursday, the 22d September, 1864, at Two o'clock precisely,

A very DESIRABLE LEASEHOLD MINING PROPERTY, known as the LEYCETT COLLIERY, situate in the parish of MADELEY, STAFFORDSHIRE, comprising the ungotten MINES of COAL, IRONSTONE, and LIMESTONE in upwards of 4000 acres, and a FARM of about 70 acres (a part of the estates of Lord Crewe), together with the COLLIERY PLANT and STOCK.

It is held under an agreement, dated the 12th day of March, 1857, made between Lord Crewe of the one part and Daniel Pearson of the other part, for a lease for the term of 21 years, commencing from the 1st day of April, 1857, at a fixed mine rent for the colliery of £600 per annum, and a surface rent for any land not held as therein mentioned (required for colliery or other purposes) of £3 or £2 per acre per annum, according to the state of cultivation. And at the rent of £72 8s. per annum for the farm.

The property lies about three miles from the Madeley station of the London and North-Western Railway, and four miles from the Newcastle-under-Lyne station of the North Staffordshire Railway. A branch railway from the London and North-Western Railway, at a point near the Madeley station, has been constructed for the use of the colliery, through part of the estate.

The whole of the property will be sold in one lot, the implements, utensils, stock, and effects being paid for by the purchaser of the estate at a valuation, as stated in the conditions of sale.

The property may be viewed on application to Mr. DAVID PEACOCK, mine agent, Tipton; or to Mr. W. H. LLOYD, at the farm; and particulars and plans may be obtained of him; and of Mr. J. H. THURSFIELD, solicitor, Wednesbury; Messrs. S. F. MILLER and SON, solicitors, 10, Duke-street, St. James's, London; Messrs. BOURNE and OWEN, solicitors, Dudley; Messrs. CLOWES and HICKLEY, solicitors, Tempie, London; at the North Staffordshire Hotel, Stoke-upon-Trent; of the auctioneer, Paradise-street, Westbromwich; or at the place of sale.

JOHN WM. HAWKINS, Chief Clerk.

S. F. MILLER AND SON, Sussex Chambers, 10, Duke-street, St. James's, London (agents for John Hunt Thursfield, of Wednesbury, Staffordshire, plaintiff's solicitor).

POLHIGEY MOOR MINE, NEAR CARNMENELLIS, IN THE PARISH OF WENDRON.

MINING MATERIALS FOR SALE.

MR. LITTLE WILL SELL, BY AUCTION, at the above mine, on Tuesday, September 20th inst., at Eleven o'clock in the forenoon, the following MINING MATERIALS, viz.:—

ONE 33 in. cylinder STAMPING ENGINE, 6 ft. stroke. ONE BOILER.

Stamps axle, with 12 heads and frames complete.

1 shears complete.	Several 10, 9, and 6 in. bucket prongs and forms.
1 horse whim.	buddles, &c.
2 horse whim kibbles.	Clack seatings, &c.
Several winze and other kibbles.	50 fms. 2½ in. rods.
7 9 ft. 11 in. pumps.	70 fms. 1⅞ in. ditto
12 9 ft. 10 in. ditto	180 fms. 1½ in. ditto
1 6 ft. 10 in. ditto	30 fms. 1¼ in. ditto
1 6 ft. 10 in. branch ditto	60 fms. iron stave ladders.
2 9 ft. 8 in. pumps.	5 balance bobs, of various sizes.
1 6 ft. 8 in. ditto	1 angle bob.
12 9 ft. 7 in. ditto	2 travelling bobs.
1 10½ ft. 10 in. working barrel.	2 underground cisterns.
2 10 ft. 9 in. ditto	1 double power winch.
1 10 ft. 6 in. ditto	2 single power ditto
1 9 ft. 6 in. ditto	2 pairs double and triple blocks.
1 8 in. H piece.	20 fms. 6 in. wood rods.
1 6 ft. 11 in. bucket doorpiece.	12 fms. 8 in. ditto
1 4 ft. 10 in. doorpiece.	3 pairs caps, and 2 pairs rod plates.
2 6 ft. 9 in. ditto	50 fms. ⅝ best chain.
1 4 ft. 8 in. ditto	40 fms. 9-16 ditto
1 6 ft. 7 in. ditto	100 fms. ⅜ and 7-16 ditto
1 6 ft. 6 in. ditto	2 beams.
1 5 ft. 10 in. flat bottom windbore.	Scales and weights.
1 6 ft. 9 in. ditto	1 grinding stone and stand.
2 6 ft. 8 in. ditto	Several bearing brasses, various sizes.
2 9 ft. 9 in. egg-end windbores.	6 3½ ft. whim pulleys.
2 9 ft. 6 in. ditto	1 4 ft. ditto
1 9 ft. 8 in. plunger pole.	3 2½ ft. ditto
Stuffing box, gland, and cass.	74 18 in. ditto

Screw stocks, an excellent set of screw taps and plates, smiths' bellows, vice, anvil, and tools; 5 cwts. cast and other steel, 10 cwts. new iron, cross-cut and hand saws, carpenters' benches, miners' and other chests, a quantity of pulley stands, stays, &c.; several cwts. flange bolts; staples, glands, &c.; 13 tin dressing frames; buddles, &c.; tin sieves and tubs, several dozen candles, white yarn, leather, grease, shovels, pick and shovel hilts, hemp and wire ropes; 3, 5, and 6 in. nails; large candle chest, several hand and wheelbarrows, quantity of miners' tools, several hundred feet wood flooring, a large quantity of new and old timber, with all the account-house furniture.

The whole of the materials are nearly new, and are well worth the attention of mine agents and others.

Further particulars may be had on application to WILLIAM WEST, Esq., Tredenham House, St. Blazey; or to the Auctioneer, at his offices, Redruth.

Dated Redruth, September 5, 1364.

SOUTH KENSINGTON.

INTERNATIONAL EXHIBITION, CROMWELL ROAD.

IMPORTANT and UNRESERVED SALE of VAN and CART HORSES, VANS, TIMBER CARRIAGES, &c.

By direction of Messrs. KELK and LUCAS, the eminent contractors.

MR. J. GOWER WILL SELL, BY AUCTION, on the premises, as above, on Thursday, September 22, at Twelve o'clock, SIXTY FIRST-CLASS YOUNG ACTIVE CART or VAN HORSES, TWENTY-TWO nearly new VANS, TIMBER CARRIAGES, &c.; thill and chain harness. Have been employed removing materials from the late Exhibition to Alexandra Park, now completed.

This stock is worthy the notice of builders, contractors, and others. The horses, universally admired, selected with every care, regardless of cost. The vans, of light and heavy construction, built expressly for this contract within the last few months. The whole for unreserved sale.

On view two days prior. Catalogues on the premises, and of the Auctioneer, at his Repository, Barbican.

RAILWAY CART HORSES, BRICK AND RUBBISH CARTS, TIMBER CARRIAGES, STONE TRUCKS, &c.

Mr. R. BROTHERHOOD'S third portion of the Thame and Oxford branch, in consequence of its completion.

MR. J. GOWER WILL SELL, BY AUCTION, at his Repository, Barbican, on Friday, Sept. 23, 1864, at One o'clock, without reservation, THIRTY FIRST-CLASS YOUNG POWERFUL CART HORSES (among them are several active tippers), nearly new BRICK CARTS, TIMBER CARRIAGES, STONE WAGONS, thill and chain harness, &c., that have been employed on the above line. On view two days prior.

ST. HELEN'S, LANCASHIRE.

TO BE LET, ON LEASE, the extensive MANUFACTURING PREMISES, known as the RAVENHEAD COPPER SMELTING WORKS, situate at ST. HELEN'S, with a wharf on the canal, and a branch of the St. Helen's Railway running through the property.

The entire site is about 20 acres, of which about 5 acres are occupied by the works, the remainder being arable and pasture land.

The buildings comprise a series of very substantially erected, light, and lofty ground-floor factories, arranged for the purposes of copper and silver smelting works, but they will be available for many other large manufacturing establishments, as they possess the advantages of direct communication by rail or water carriage with all parts of the kingdom.

Coals can be obtained from pits in the neighbourhood, at an almost nominal price, and labour is cheap and abundant.

For particulars, apply to Messrs. FULLER and HORSEY, 13, Billiter-street, London, E.C.; and of Messrs. HARRISON and FINCH, 2, Gray's Inn, London.

VULCAN WORKS, CHURCH, NEAR ACCRINGTON AND BLACKBURN, TO MACHINISTS, ROLLER MAKERS, ENGINEERS, IRONFOUNDERS, BROKERS, AND OTHERS.

MR. KIRK is favoured with instructions from the assignees of Mr. J. C. Lupton, roller maker, machinist, tool maker, engineer, ironfounder, &c., to arrange, catalogue, and SELL BY AUCTION, under a deed of assignment, for the benefit of the creditors, on Wednesday, Thursday, and Friday, the 21st, 22d, and 23d days of September, commencing at Eleven o'clock each day, the whole of the VALUABLE TOOLS, UTENSILS, PLANT, MACHINERY, STEAM ENGINES, BOILERS, STOCK IN TRADE, &c., in the works, foundry, fitting shops, smiths' shops, stores, &c., on these extensive works, and which comprise a most excellent double-geared self-acting break lathe, with face plates, slide rest, boring heads, on cast-iron bed 21 ft. long, 24 in. face; also an extensive assortment of double and single-speed lathes, from 12 in. centres down to 5 in., on beds from 6 ft. to 26 ft. long; capital planing machines, to plane from 16 ft. long; 2 upright drilling machines, and 5 horizontal ditto; excellent patent diagonal self-acting milling machine; a capital roller punching machine, on 7 ft. sliding table (Biesadale's and Ryder's patent), and nearly new; 7 slotting engines, from 2 to 10 cutters, quite new; 2 self-acting squaring machines (Mariand's patent), nearly new; a beam CONDENSING STEAM ENGINE; wrought-iron BOILER, with mountings complete; a double self-acting grindstone, in cast-iron trough, by W. Muir and Co.; 1 small ditto; smiths' anvils, swage and stretching blocks, smiths' tools, a large quantity of new fluted rollers, cast-steel in bars, steel cutters and other tools, leather strapping, wrought-iron shafting; powerful gib crane, to lift 15 tons; quantity of moulding boxes, cast and wrought-iron cisterns, ladles; large assortment of wood patterns, comprising one horizontal steam engine complete, lathe beds, and other tools; 5 and 6 in. vices, usable files, chisels and hammers; an immense quantity of wrought and cast-iron scrap and new bar iron, office fixtures, &c., and other valuable effects connected with the trade.

For further particulars see catalogues, which may be had of Messrs. HALL and RAILWIN, solicitors, Clitheroe; or of the Auctioneer, at his offices, 8, Essex-street, Kingstreet, Manchester.

BY ORDER OF THE LIQUIDATORS.

PATENT ALKALI, BLUE VITRIOL, AND METAL WORKS, ST. HELEN'S, LANCASHIRE.

LARGE SALE OF BUILDINGS, MATERIALS, &c.

MR. KIRK respectfully announces that he is instructed to catalogue and SELL, BY AUCTION, on Wednesday, Thursday, and Friday, the 28th, 29th, and 30th days of September, commencing at Eleven o'clock each day, the whole of the BUILDINGS of EVERY DESCRIPTION (in order that the whole may be taken down, removed, and the ground cleared) forming the EXTENSIVE WORKS known as the far-famed PATENT ALKALI, BLUE VITRIOL, AND METAL WORKS, at ST. HELEN'S, LANCASHIRE, including EXTENSIVE RANGES of SUBSTANTIAL BRICK BUILDINGS, blue slated roofing of the very best Welsh blue slates, rafters, joists, beams, planking, &c., immense in quantity, and excellent in quality; cast and wrought ironwork in columns, girders, tie rods, &c.; lead flashings, gutterings, shoots, &c.; flags, tileing, &c. Also, a 25 horse CONDENSING BEAM ENGINE, large cast-iron water tank, together with a vast assemblage of other valuable materials and effects.

Full particulars in catalogues, which are now ready, and may be had of the Auctioneer, at his offices, 8, Essex-street, Manchester.

MR. BRANCH WILL SELL, BY AUCTION (by direction of the liquidators of the company), at the office of the BRADA UNITED MINING COMPANY (LIMITED), Fenwick Chambers, Liverpool, on Wednesday, the 21st day of September, 1864, at Half-past Two o'clock in the afternoon precisely, all those VALUABLE MINES, VEINS, SEAMS, and BEDS of LEAD, SILVER-LEAD, COPPER, and ZINC ORE, situate in the parish of RUSHEN, south-west end of the ISLE OF MAN, now the property of the Brada United Mining Company (Limited); and also all the VALUABLE MACHINERY and WORKING UTENSILS, and all ores, matters, and things the property of the said company, now in, upon, or about the mines.

The mines are held under lease from the Crown, for the term of 21 years, from the 10th October, 1851, subject to certain rents and royalties.

The mines have been recently surveyed by two experienced Cornish miners, whose report is of a most encouraging character. This report can be seen on application, as mentioned below.

The mines are offered for sale simply because the present proprietors are unable to find the necessary capital for working them.

All further information may be obtained on application to Mr. JAMES MOORE, Fenwick Chambers, Liverpool, the secretary of the company; or to Messrs. STOCKLEY and WRIGLEY, solicitors, 16, Castle-street, Liverpool.

IMPORTANT SALE OF COLLIERY PLANT, POWERFUL WINDING AND PUMPING ENGINES, STEAM BOILERS, MAIN CRAB and GIN, LARGE PATENT METAL PULLEYS, 19-in. and 16-in. PUMPS, WIRE and HEMP ROPES, MALLEABLE IRON PIT CAGES, SPEARS and SPEAR PLATES, SIXTEEN HUNDRED YARDS of RAILS, ASHLAR STONE, FIREBRICKS, SMITHS' TOOLS, &c., &c., FOR SALE BY AUCTION at CHILTON COLLIERY, FERRY HILL RAILWAY STATION, in the COUNTY of DURHAM.

MR. GEORGE HARDCASTLE has the honour to announce that he is instructed by the Trustees of the Right Hon. the Earl of Eldon to SELL BY AUCTION, at the CHILTON COLLIERY, on Tuesday, October 4, 1864, all the VALUABLE WORKING PLANT, comprising—

ONE NEW DOUBLE ACTION HORIZONTAL HIGH PRESSURE WINDING ENGINE, by Murray, of Chester-le-Street, with two 22-in. cylinders, 4-ft. stroke, metal fly-wheel, 18 ft. diameter, and metal drum, 8 ft. 9 in. by 4 ft.

ONE HIGH PRESSURE PUMPING BEAM ENGINE, 40-in. cylinder, and 6-ft. stroke.

ONE HIGH PRESSURE WINDING ENGINE, 25-in. cylinder, 5-ft. stroke, with metal fly-wheel, 18 ft. diameter; rope rolls, 9 ft. diameter; and malleable iron crank.

FIVE STEAM BOILERS—three 30 ft. long, two 25 ft. long, and all 6 ft. diameter.

ONE SMALL BOILER, 8 ft. by 3 ft. 4 in.

TWO METAL PATENT PULLEYS, 10 ft. diameter, Memel shear legs, pulley frame, and stays, brass carriages, &c.

Two new malleable iron pit cages, 7 ft. 6 in. long, 2 ft. 10 in. broad, and 4 ft. 6 in. deep; pit cradle and chains; new main crab, with oak main piece, 18 in. diameter; new jack gin, with 9-ft. drum, over trees, frames, and uprights; five 19-in. pumps, fourteen 16-in. pumps, and one tapering pump—all 10 ft. long; one 18-in. working barrel, 12ft. 6 in. long; one bucket doorpiece, 6 ft. 6 in. long; one powerful three-throw horse crank force pump, 12-in. stroke, and 8-in. pumps—double powered winch and chain, red pine spears, malleable spear plates, bottom rods, bucket joints, buckets and clacks, pump bolts, cross bars, bucket door bars and bolts, leather hoggers, lead weases, leather hose, pump and spear slings; eight fire doors, fire bars, and boiler fire tools; two 3-in. round wire ropes, 60 fms. each; two 3-in. flat wire ropes, 65 fms. each; one 10-in. hemp crab rope; one 7-in. hemp jack rope, and sundry other ropes and falls; 1600 yards of malleable iron rails, from 40 lbs. to 80 lbs. per yard; chairs, crossings, and sleepers; patent tub weighing-machine; patent steam gauges; sundry metal pipes, from 4 to 6 in. diameter; pair of iron blocks for 4½-in. rope; crane chain; smiths' vice, bellows, fullers, swages, tongs, and anvil; stone hammers, spades, shovels, old brass, lead, and iron; a large quantity of massive Ashlar freestone, "Newfield" firebricks, and fire-clay lumps; 3-in. and other planks, and sundry building materials, walls, roofs, doors, windows, &c.

The sale to commence at 11 o'clock; luncheon for purchasers at 12; sale resumed at 1.

N.B.—The Chilton Colliery is close to the North Eastern and the West Hartlepool Railways, with both of which it has locomotive connections.

PAYMENTS.—All payments to be made in cash.

Catalogues to be had, on and after Friday, the 9th of September inst., upon application to JOHN JOHNSON, Esq., mining engineer, Tynemouth; Mr. BENJAMIN DAWSON, South Hetton; or at the Sunderland Sale Offices.

The Sunderland Sale Offices, Lambton-street, Sunderland, Sept. 1, 1864.

NORTHUMBERLAND—WYLAM.

IMPORTANT COLLIERY, IRONWORKS, AND FIRE-BRICK WORKS, ON THE RIVER TYNE.

MR. PYE (under instructions from the proprietor) WILL SELL, BY AUCTION, at the Queen's Head Inn, Newcastle-upon-Tyne, on Tuesday, the 11th day of October, 1864, at One for Two o'clock precisely, in One Lot, a LEASE, for 63 years, of the well-known SEA-SALE and LAND-SALE COLLIERY, called WYLAM COLLIERY, the WYLAM IRONWORKS, the WYLAM FIRE-BRICK WORKS, and the WORKMEN'S HOUSES and APPURTENANCES belonging to these concerns; together with the absolute property in agreements for other royalties and privileges, and in all the VALUABLE PLANT, COLLIERY MATERIALS, and GASWORKS.

Printed particulars may be had, and other information obtained, from Messrs. T. E. FORSTER and Co., mining engineers, or Mr. R. R. DEES, solicitor, Newcastle-upon-Tyne.

MERIONETHSHIRE, NORTH WALES.

TO BE DISPOSED OF, a SLATE QUARRY PROPERTY, of vein proved, and position commanding all advantages. Also, a VALUABLE GRANT, possessing a RICH SILVER-LEAD MINE, with other lodes, very favourable.—To treat for the same, apply to Mr. H. P. M. OWEN, C.E., Penrhyndendraeth, via Carnarvon.

Mr. OWEN has OTHER MINES and QUARRIES TO DISPOSE OF. Also, begs to offer his services to gentlemen in all inspections of native mineral, with practical reports thereon. Immediate attention given.

TO BE DISPOSED OF, PART or the WHOLE of a good CHINA CLAY WORK, in the county of CORNWALL, with ample water-power, capable of producing from 2000 to 3000 tons of clay of the best quality annually. Parties desirous of treating for same may have full particulars on applying to "A. B.," Post-office, Bodmin.

GRANITE QUARRY, STEWARTRY OF KIRKCUDBRIGHT.—TO LET, for such term of years as may be agreed on, the QUARRY immediately ADJOINING the LITTLE FLEET VIADUCT, between Gatehouse and New Galloway stations, on the Port Patrick Railway. The quality of the granite is excellent, as may be seen by inspection of the viaduct, the material for which was obtained from the quarry in question. Facilities for the works will be afforded by the Port Patrick Railway Company. Plans may be seen at Cally Office, Gatehouse.—Offers to be sent in writing to H. J. MOULE, Esq., Gatehouse, from whom further particulars may be obtained.

SLATE QUARRIES.—TO BE LET, ALLT DINAS SLATE QUARRY, situate in the parish of Lanafon Faur, in the county of Brecon, ten miles from Builth, five from the intended railway station at Maesceinfod on the Central Wales Railway, and six from the Mid Wales Railway at Newbridge.

The slate vein runs up from the river to the top of the mountain, to a height of 311 ft., is about half a mile in length, and 200 yards in width.

Four openings have been made in the vein, and although penetrated only to a few feet from the surface it produces good slates.

The slate is of good quality and fine texture, of bluish grey colour, the same as Lord Palmerston's quarry, Festiniog and Aberllefenny.

The metal and quality of the slate is strong and durable, will bear carriage to any part of the world, and stands the heat necessary for enamelling perfectly.

There is room for tipping rubbish for centuries, and a plentiful supply of water at all times of the year.

Apply to J. PRATT, Esq., land agent, Crickhowell.

FOR SALE, a PATENT MINING PORTABLE ENGINE, by Medwin and Hall, engineers, 92, Blackfriar's-road, London, No. 34, 18 inch cylinder, 2 feet 6 in. stroke, double tube, boiler in good repair.

Apply to Messrs. PHILIPPS and LEWIS, merchants, Carmarthen.

CLAYTON, SHUTTLEWORTH, AND CO., ENGINEERS,

MANUFACTURERS of PORTABLE and FIXED STEAM ENGINES, MACHINERY for PUMPING, HOISTING, GRINDING, SAWING, &c., ENGINES for STEAM CULTIVATION, SELF MOVING ENGINES for COMMON ROADS and AGRICULTURAL PURPOSES GENERALLY.

STAMP END WORKS, LINCOLN; and
78, LOMBARD STREET, LONDON.
ALSO AT
LOWENGASSE No. 44, LANDSTRASTE, VIENNA, and GEGENUBER DEM BAHNHOF, PESTH.

Descriptive, illustrated, and priced catalogues free per post.
SPECIAL DRAWINGS WHEN REQUIRED.
THE BEST STEAM THRASHING MACHINERY MADE.

Swan Rope Works.

GARNOCK, BIBBY, AND CO.,
CHAPEL STREET, LIVERPOOL,

MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.
MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER, and THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH.

Exhibition Medal, 1862.

WEIGHING MACHINERY
CONSISTING OF
PLATFORM WEIGHING MACHINES and HIND'S PATENT RAIL and ROAD WEIGHBRIDGES, overhead TRAVELLING WEIGHING CRANES and CRABS, RAILWAY WEIGHING TURNABLES, &c.

CRANES
Of the WALL, PILLAR, PORTABLE, or TRAVELLING KINDS; and CRABS and WINCHES for STEAM or HAND POWER, &c. Also, TURNTABLES, WATER COLUMNS, TANKS, and PUMPING MACHINERY, and GENERAL RAILWAY PLANT, manufactured by

RICHARD KITCHIN, ENGINEER AND IRONFOUNDER,
SCOTLAND BANK IRONWORKS, WARRINGTON.

Prize Medal Awarded Great Exhibition, 1851, and International Exhibition, 1862.

PATENT SAFETY FUZE WORKS, TUCKINGMILL, CORNWALL.—We beg respectfully to inform the public that since the decease of the late Mr. THOMAS DAVEY this firm has consisted of JOHN SOLOMON BICKFORD, GEORGE SMITH, FRANCIS PRYOR, SIMON DAVEY, and WILLIAM BICKFORD SMITH. It is requested that all letters may be addressed, and all cheques and drafts made payable to
19, 20 BICKFORD, SMITH, AND CO.

THE UNITY PATENT SAFETY FUSE COMPANY SCORRIER, CORNWALL, SOLICIT ORDERS for the DIFFERENT KINDS of SAFETY FUSE which they are PREPARED to SUPPLY, of SUPERIOR QUALITY, and of ANY LENGTH.

EDWARDS'S PATENT MINERAL ORE AND COAL WASHING MACHINE.—This is by far the MOST ECONOMICAL, as well as the MOST PERFECT MACHINE MADE. Each machine is capable of washing 25 to 50 tons per diem, according to quality.—Full particulars, testimonials, &c., may be obtained from E. EDWARDS, Esq., C.E., 1, York-buildings, Adelphi, where a working model may be seen.

Gun Cotton Manufactory.

MESSRS. THOMAS PRENTICE AND CO., GREAT EASTERN CHEMICAL WORKS, STOWMARKET, SUFFOLK.

This manufactory has been established for the purpose of preparing GUN COTTON, according to the Austrian process, and was opened on the 26th of January last, under the inspection of Baron Lenk. Messrs. Thomas Prentice and Co. are now able to SUPPLY GUN COTTON, in its most approved form, either for the purposes of engineering and mining, or for military and submarine explosion, and for the service of artillery, as a substitute for gunpowder.

The advantages of Baron Lenk's GUN COTTON are the following:—

FOR PURPOSES OF ARTILLERY.—The same initial velocity of the projectile can be obtained by a charge of gun cotton one-fourth of the weight of gunpowder. There is no smoke from the explosion of gun cotton; it does not foul the gun, nor heat it to the injurious degree of gunpowder. There is much smaller recoil of the gun. The same initial velocity of projectile is produced, with a shorter length of barrel. In projectiles of the nature of explosive shells it breaks the shell more equally into much more numerous pieces than gunpowder. When used in shells, one-third the weight of gun cotton produces double the explosive force of gunpowder.

FOR CIVIL ENGINEERING AND MINING.—In driving tunnels through hard rock a charge of gun cotton of given size exerts double the explosive force of gunpowder, thus a smaller number of holes is necessary. It may be so used as, in its explosion, to reduce the rock to much smaller pieces than gunpowder, and so facilitate its removal. As gun cotton produces no smoke, the work can proceed much more rapidly, and with less injury to the health of the miners. In working coal mines the advantages of bringing down much larger quantities of material with a given charge, and the absence of smoke in the explosion, enable a much greater quantity of work to be done in a given time at a given cost. The weight of gun cotton required to produce a given effect in mining is only one-sixth part of the weight of gunpowder. In blasting rock under water the wider range and greater force of a given charge is a great element in cheapening the cost of submarine work. The peculiar local action of gun cotton, to which the effects of gunpowder show no analogy, enables the engineer to destroy and remove submarine stones and rocks, without the preliminary delay and expense of boring chambers for the charge.

FOR MILITARY ENGINEERING.—The facility of transport is increased, the weight of gun cotton being one-sixth that of gunpowder. The peculiar localised action of gun cotton facilitates the destruction of bridges and palisades, and every obstacle. For submarine explosion, gun cotton has the advantage of a much wider range of destructive power than gunpowder. For the same purpose gun cotton, from its lightness, has the advantage of keeping afloat the water-tight case in which it is contained, while gunpowder sinks it to the bottom.

FOR NAVAL WARFARE.—In the batteries of ships, between decks, and in casemated forts, the absence of smoke facilitates continuous rapid firing. The absence of fouling and of heating are equally advantageous for naval as for military artillery.

GENERAL ADVANTAGES.—Time, damp, and exposure do not alter the qualities of the patent gun cotton. It has already been preserved 10 years without injury or decay. It can be transported through fire without danger, simply by being wetted, and when dried in the open air it becomes as good as before. In the case of a ship, or a fortress, or a city being on fire, this quality may be of the greatest value. It is much safer than gunpowder, owing to its being manufactured in the shape of rope or yarn. It cannot escape from its package, or be spilled by accident. The patent gun cotton is entirely free from the danger of spontaneous combustion, and secures that degree of safety and certainty which, at the time of the original invention, the gun cotton of Schönbein did not possess.

Messrs. THOMAS PRENTICE and Co. are now in a position to contract with the owners of mines, engineers, contractors, and governments for gun cotton prepared in the various forms required for their use. Mining charges will be supplied in the rope form, according to the diameters of bore required, and gun cotton match-line, as well as instructions for using it in mines, will be supplied with it.

The great advantage of gun cotton make its use in practice very much cheaper than its comparative price would appear to show; in blasting rock, for example, the rapidity and quantity of the work done, with a given expense of wages, &c., is largely in favour of gun cotton.

Messrs. THOMAS PRENTICE and Co. are also prepared to manufacture the gun cotton, and deliver it in the form of gun cartridges, adapted to every description of ammunition; all they require for this purpose being a drawing of the gun, gunpowder cartridges, and ammunition, with the specification of weights, sizes, and initial velocities.

Artillerists who prefer to manufacture their own cartridges may make special arrangements with the patentee through Messrs. PRENTICE and Co.

Stowmarket, March 10, 1864.

COLORADO MINING AGENCY OF
GIBSON AND DELANY.
OFFICES,—DENVER AND CENTRAL CITIES, COLORADO; and 4 and 6, PINE STREET, NEW YORK CITY.
INFORMATION GIVEN on all COLORADO MINING PROPERTY, EXAMINED, and REPORTED UPON.
FULLY DEVELOPED MINES FOR SALE.
MINING PROPERTY BOUGHT, SOLD, or TAKEN ON COMMISSION.

Stockholders and other parties having interests in Colorado mining property can at all times obtain confidential and reliable information to latest dates, as to the value of their investments.

MR. R. SYMONS, SURVEYOR, &C., TRURO, having engaged a lithographic artist, is PREPARED to EXECUTE EVERY DESCRIPTION of MAPS, PLANS, CHARTS, PROSPECTUSES of MINES, &c., in the best style of art, at the shortest notice, and at moderate prices.

Surveying and Lithographic Offices, Pydar-street, Truro, July 14, 1864.

MR. ROBERT SYMONS, MINE SURVEYOR, &C., TRURO, possessing an intimate knowledge of Cornish mines, is well qualified to ADVISE CAPITALISTS as to their BUYING or SELLING SHARES. For a fee of two guineas Mr. R. SYMONS will ascertain and accurately report the state of any mine within 20 miles of Truro; if beyond that distance a fee of three guineas will be charged.

THE BANKING, MINING, AND JOINT-STOCK COMPANIES REVIEW,
A JOURNAL OF COMMERCE, TRADE AND MANUFACTURE,
SCIENCE AND THE ARTS.
Published every Wednesday. Subscription, £1 1s. annually. Price 6d. stamped.

RAILWAYS AND MINES

Capitalists who seek safe and profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the *bona fide* merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the money market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range for profit than any other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £15 to £25 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to railways and mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment; we will, therefore, forward, upon receipt of Post-office order for 5s., the names of six dividend and six progressive companies that will, in our opinion, well repay capitalists for money employed.

Messrs. TREDINNICK AND CO., STOCK and SHAREBROKERS, and DEALERS IN BRITISH MINING SHARES, 78, LOMBARD STREET, E.C.

NICHOLLS, WILLIAMS, AND CO., ENGINEERS,
BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the manufacture of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. RAILWAY WORK of EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, WILLIAMS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, WILLIAMS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

ELLIS LEVER,
PATENTEE AND MANUFACTURER OF
FLEXIBLE TUBING FOR MINES, AND COLLIERY BRATTICE CLOTH.
WEST GORTON WORKS, MANCHESTER.

PALFREEMAN AND CLARK, PRACTICAL ENGINEERS, are PREPARED to MAKE DRAWINGS and UNDERTAKE the EXECUTION of LOCOMOTIVES and STATIONARY ENGINES for IRONWORKS, MINES, &c., and MACHINERY in GENERAL. They will also superintend the execution of orders in this country for abroad.—4, Corporation-street, Manchester.

THE MERTHYR RAILWAY IRON AND WAGON COMPANY (LIMITED).
Capital £25,000, in 250 shares of £100 each.
DIRECTORS.
JOHN WARD, Esq., Whittington, Salop.
WILLIAM DE WINTON, Esq., Watton Mount, Brecon.
JOHN HAYWARD WILLIAMS, Esq., Spring Bank, Welchpool.
JOHN LEWIS, Esq., C.E., Merthyr Tydvil.
JOHN JAMES WILLIAMS, Esq., M.D., Mount Pleasant, Brecon.
REES EDWARD DAVIES, Esq., The Mardy, Merthyr.
BANKERS—Messrs. Wilkins and Co., Merthyr Tydvil and Brecon.
SECRETARY—Mr. John Williams, Lion-street, Brecon.
SOLICITORS—Messrs. Cobb and Price, Brecon.

Copies of the prospectus may be obtained on application to the solicitors or secretary. Applications for shares must be made to the secretary, on or before the 1st of October next, but no allotment will be made until the first meeting of the directors, which will take place in that month.

BEVERLEY IRON AND WAGON COMPANY (LIMITED).—RAILWAY WAGON BUILDERS, MAKERS of the PATENT PRIZE CLOD CRUSHERS and AGRICULTURAL IMPLEMENTS, MANUFACTURERS of PATENT WHEELS, &c., with wood or iron naves.

Coach builders, wheelwrights, coach proprietors, &c., should use these wheels, as they are the best and cheapest in the world.

Gentlemen, farmers, and others applying direct to the works will be liberally treated.

Catalogues, prices, &c., can be obtained on application to the Works, Beverley, Yorkshire. JAMES DEWHIRST, Sec.

RAILWAY CARRIAGE COMPANY (LIMITED),
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

THE BIRMINGHAM WAGON COMPANY (LIMITED) is PREPARED to SUPPLY RAILWAY WAGONS of EVERY DESCRIPTION, capable of carrying 6, 8, or 10 tons, at annual rentals, or for purchase on deferred payments, on advantageous terms. EDMUND FOWLER, Sec.
OFFICES,—3, NEWHALL STREET, BIRMINGHAM.

THE MIDLAND WAGON COMPANY,
ESTABLISHED 1853.

RAILWAY WAGONS.—This company having from SIX to SEVEN THOUSAND COAL, COKE, IRONSTONE, and BALLAST WAGONS, have generally a number TO LET for one or more years, including repairs, at Rugby, Peterboro', Shrewsbury, Chester, Carnforth, Stoke-on-Trent, Staveley, Droitwich, Worcester, Gloucester, Reading, Hereford, Newport (Mon.), Cardiff, and Birmingham.

They also CONTRACT for WAGON REPAIRS at any of the above stations.

The company BUILD EVERY DESCRIPTION of RAILWAY WAGONS and CARRIAGES for CASH, or by DEFERRED PAYMENTS, extending over three, five, seven, or ten years. HENRY BRIDGES, Sec.
Midland Works, Birmingham.

COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY,
MANUFACTURED by GEORGE LOW,
MILLGATE IRONWORKS, NEWARK-UPON-TRENT,

Who respectfully begs to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes.

The TURBINE, WINDING, and PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.

G. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.

MANUFACTURER of WINDING, PUMPING, CRUSHING, STAMPING MACHINERY, WINDING ENGINES, WATER WHEELS.

IMPROVED TURBINE WATER WHEELS CONSTRUCTED either to WORK VERTICALLY or HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.

G. Low begs to recommend a special class of turbine adapted for extreme high falls (200 to 500 ft.), and consuming small quantity of water. This turbine will work with equal advantage without running at an excessive velocity. Also,

MANUFACTURER of IMPROVED BORING MACHINES for DRIVING ADITS.

BASTIER'S PATENT CHAIN PUMP.
APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.

J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects armers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus, sand, mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors, and others, for the USE of his INVENTION.
OFFICES, 47, WARREN STREET, FITZROY SQUARE.
London, March 21, 1859. Hours from Ten till Four. J. U. BASTIER C.E.

TO IRON AND COAL MASTERS, MINING AND QUARRY COMPANIES, &c.
IMPROVED BLACK VARNISH,
FOR PREVENTING IRON FROM RUST, AND WOOD FROM DECAY.

A BRILLIANT JET BLACK, SUPERIOR to PAINT in APPEARANCE, dries in less time, contains preservative qualities of the best description, and is economical in its use; one gallon, at 1s., is equal to 14 lbs. of paint, which costs 4s. For COLLIERY HEAD GEARING, RAILWAY WAGONS, BOILERS, CASTINGS, CANAL BOATS, &c., it is especially adapted. In casks containing 10, 15, and 20 cwts. each. In quantities of 1 ton and upwards, price £11 per ton.

TURPENTINE SUBSTITUTE.

GLOVER and Co. have now on hand a really splendid painting sample of spirits of turpentine substitute, a pure crystal, not more volatile than the genuine American turpentine, and quite inoffensive to smell. Price, 2s. per gallon, in 30-gallon casks.

PETROLEUM.

This oil gives a pure, white, soft, and brilliant light, easily regulated, and portable. For works or public buildings, where gas is not desirable, the brilliancy and economy of the article are unequalled.

WASTE NO OIL.
STRONG IRON OIL CISTERNS.

Not liable to leak, and which economise space in the stores. From 600 gallons, 48 diameter by 84 in height, price £10 10s., down to 10 gallons, 15 diameter by 21 in height, price 15s., WITH EVERY VARIETY OF SIZE AND PRICE BETWEEN.

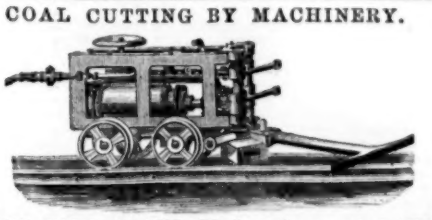
STRONG IRON BUCKETS:—
2½ galls. .. 4s. 6d. | 3 galls. .... 5s. 0d. | 3½ galls. .. 5s. 6d. | 4 galls. ....6s. 0d.

WAGON GREASE.
GLOVER AND CO., No. 40, MANESTY LANE, LIVERPOOL.

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS (the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED a PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.
Warehouse, 81, Upper Ground-street, London, S.

COAL CUTTING BY MACHINERY.

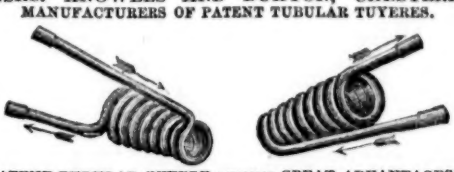


MESSRS. RIDLEY AND CO. have, by recently PATENTED IMPROVEMENTS, COMPLETED their TRUNK COAL CUTTING MACHINE, WORKED by COMPRESSED AIR, and are NOW PREPARED to NEGOCIATE for the USE, and to SUPPLY MACHINES, which will be found to COMBINE SIMPLICITY of CONSTRUCTION with PORTABILITY and ECONOMY in WORKING. By the use of these machines a CONSIDERABLE SAVING of COAL is EFFECTED, and the COST of LABOUR MUCH REDUCED. Each machine will be guaranteed as to its capabilities, &c.

All applications to be made to Messrs. RIDLEY and Co., No. 11, South-street, Finsbury London, E.C.; or Mr. PERCY BANKART, agent, 9, Clement's-lane, E.C.

*** COLLIERY PROPRIETORS are CAUTIONED against PURCHASING or USING MACHINES, the construction of which will constitute an INFRINGEMENT of the ABOVE PATENT.

MESSRS. KNOWLES AND BUXTON, CHESTERFIELD.
MANUFACTURERS OF PATENT TUBULAR TUYERES.



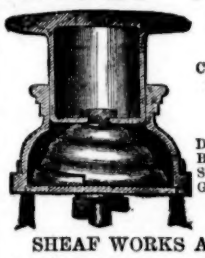
The PATENT TUBULAR TUYERE possesses GREAT ADVANTAGES over the ORDINARY TUYERES, both for its DURABILITY and EASY WORKING. A current of cold water going direct to the nozzle prevents their destruction, however much they may be exposed to the fire.

We repair them at half the first cost, making them equal in size to new ones, all parties returning them carriage paid.

No. 1 tuyere,	16	in.	long	28s. each.
No. 2	18			32s. "
No. 3	20			36s. "
No. 4	22			40s. "
No. 5	24			44s. "

Delivered at Chesterfield station. Terms, nett cash quarterly.

THOMAS TURTON AND SONS,
MANUFACTURERS OF



CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS, and
FORGINGS of EVERY DESCRIPTION.
DOUBLE SHEAR STEEL, BLISTER STEEL, SPRING STEEL, GERMAN STEEL.
FILES MARKED T. TURTON.
EDGE TOOLS MARKED WM. GREAVES & SON
Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.

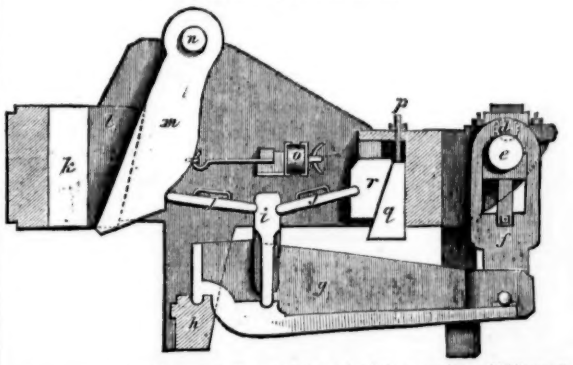
SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE,—35, QUEEN STREET, CANNON STREET, CITY, E.C. where the largest stock in the world may be selected from.

CREASE'S PATENT EXCAVATING MACHINERY, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.

Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.

Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE, Tavistock, Devon.

BLAKE'S PATENT STONE BREAKER,
OR ORE CRUSHING MACHINE,
FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.



It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England.

The above section illustrates Blake's Stone Breaker, just as made the last five years, and is fully protected in every part by patents.

Extract from Specification:—A short but powerful vibration is imparted to one or both of the jaws by any convenient arrangement, and combination of powerful levers, worked by a crank or eccentric on the main shaft.

LEGAL PROCEEDINGS will be taken at once against any person or persons found making, using, or vending any machine, the construction of which will constitute an infringement on the above patent. Read extracts of testimonials:—

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard winstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADDISON, Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCESTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. SILAS WILLIAMS

For circulars and testimonials, apply to—
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MEADOW LANE, LEEDS.
Only maker in the United Kingdom.

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Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland.

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DR. SMITH has just published a Free Edition of his valuable work, the PRIVATE MEDICAL FRIEND (116 pages), on the Self-Cure of Nervous Debility, Loss of Memory, Dimness of Sight, Lassitude, &c., resulting from the secret sins of youth. Copies will be sent post-free to any address on receipt of a directed envelope, enclosing two postage stamps.—Address, Dr. SMITH, No. 8, Burton-crescent, Tavistock-square, London, W.C.

DR. WATSON, F.R.A.S. (of the Lock Hospital, and College of Physicians and Surgeons) on the Self Cure of Nervous and Physical Debility, Spermatorrhœa, Decline of Manly Vigour, and Diseases of Indiscretion, with Means for Perfect Restoration, free for six stamps, by Dr. WATSON, 1, South-crescent, Bedford-square, London. Consultation daily from Eleven till Two and Six till Eight. Sunday, Ten till Twelve.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid.
1200	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—		10 8 0	0 15 0—April, 1864
4000	Bedford United (copper), Tavistock†	2 6 8	2½	2½ 2⅝	13 9 0	0 2 6—July, 1864
1248	Boscaswell (tin, copper), St. Just	6 15 0	—		1 5 0	0 5 0—May, 1864
200	Botallack (tin), St. Just	91 5 0	—		477 15 0	0 0—May, 1864
5000	Bronfloyd (lead), Cardigan [L. £5]	2 7 6	—	4½	0 19 0	0 2 6—April, 1864
916	Cargoll (silver-lead), Newlyn	15 5 7	40	35 40	8 10 0	0 15[10—Aug. 1864
1600	Carn Brea (copper, tin), Illogan	15 0 0	—		280 10 0	2 0 0—June, 1864
2000	Clifford Amalgamated (cop.), Gwen	20 0 0	32	31 32	32 8 6	0 10 0—Aug. 1864
12000	Copper Miners of England	25 0 0	—		7½ per cent.	—Half-yrly.
40000	Ditto ditto (stock)	100 0 0	—		1 per cent.	—Half-yrly.
867	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0	—		12 3 0	0 15 0—July, 1864
128	Cwmystwith (lead), Cardiganshire*	60 0 0	—		267 10 0	4 0 0—July, 1864
280	Derwent Mines (sil.-lead), Durham	500 0 0	—		152 0 0	5 0 0—June, 1864
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	590		923 0 0	10 0 0—July, 1864
358	Dolcoath (copper, tin), Camborne*	123 17 6	—		769 10 0	6 0 0—Aug. 1864
13800	Drake Walls (tin, copper), Calstock	2 1 0	1⅜		0 18 0	0 1 6—May, 1863
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	66	67 69	123 0 0	2 0 0—July, 1864
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	28	26 28	11 5 0	1 0 0—July, 1864
300	East Darren (lead), Cardiganshire*	32 0 0	—		99 10 0	2 0 0—Aug. 1864
128	East Pool (tin, copper), Pool, Illogan	24 5 0	—		369 10 0	4 0 0—June, 1864
1906	East Wheal Lovell (tin), Wendron	2 13 6	8¼	9¾ 10¼	1 10 0	0 10 0—May, 1864
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—		64 0 0	1 0 0—June, 1864
6000	Frank Mills (lead), Christow	3 18 6	—		1 9 6	0 5 0—Aug. 1864
12500	Great Laxey (lead), Isle of Man [L.]	4 0 0	16	15 16	0 11 0	0 5 0—June, 1864
1798	Great Wheal Fortune (tin), Breage	18 6 0	—	7½ 8½	5 15 0	0 10 0—Nov. 1863
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	28½	32 33	3 19 6	0 12 0—June, 1864
112	Great Work (tin), Germoe	100 0 0	—		15 0 0	5 0 0—Aug. 1864
1024	Herodsfoot (id.), near Liskeard [S.E.]	8 10 0	40		28 0 0	1 15 0—Feb. 1864
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	—		424 10 0	3 0 0—Aug. 1864
9000	Marke Valley (copper), Caradon	4 10 6	4⅞	4½ 4¾	2 14 0	0 1 0—July, 1864
3000	Minera Boundary (lead), Wrexham [L.]	1 0 0	—		0 2 0	0 2 0—Aug. 1864
1800	Minera Mining Co. [L.], (id.), Wrexham	5 0 0	—		155 18 0	10 0 0—Aug. 1864
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	27½	27¼	16 19 7	0 12 3—Jan. 1864
40000	Mwyndy (iron ore) [L. £4] [S.E.]	2 16 0	—		0 4 0	0 2 0—April, 1864
250	Nanty Mines (lead), Montgomery	20 0 0	—		7 0 0	1 0 0—June, 1864
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6	2½	2 2½	0 9 6	0 1 6—July, 1864
5936	North Treskerby (copper), St. Agnes	1 9 0	3¾	3¼ 3½	0 13 0	0 2 6—Feb. 1864
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	—		36 19 0	0 2 6—Mar. 1863
202	Parys Mines (copper), Anglesey [L.]	50 0 0	—		112 10 0	10 0 0—July, 1864
1772	Poiberro (tin), St. Agnes	15 0 0	—		7 19 6	0 10 0—Nov. 1863
512	Polbreen (tin), St. Agnes	8 0 0	—		1 0 0	1 0 0—July, 1863
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7	40	38 40	74 5 0	1 0 0—Aug. 1864
6000	Rosewall Hill and Ransom United	2 16 0	—	2¾ 3	0 10 0	0 1 6—June, 1863
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	520	510 520	445 10 0	7 0 0—July, 1864
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0	—		74 10 0	1 0 0—May, 1863
498	S. Wh. Frances (cop.), Illogan* [S.E.]	18 13 9	50	45 50	370 13 6	1 0 0—Nov. 1863
4000	St. Day United (tin), Redruth	14 0 0	—	⅛ ⅝	0 5 0	0 5 0—Mar. 1864
940	St. Ives Consols (tin), St. Ives†	8 0 0	—		490 10 0	0 10 0—May, 1864
6000	Tincroft (cop. tin), Pool, Illogan [S.E.]	9 0 0	20	18 19	15 1 0	0 12 6—June, 1864
4200	Vigra and Clogau (copper) [L. £5]	4 0 0	—		6 2 6	1 10 0—Mar. 1864
6000	West Basset (copper), Illogan [S.E.]	1 10 0	10	8¼ 8¾	25 13 0	0 5 0—July, 1864
3000	W. Chiverton, (id.), Perranzabuloe [S.E.]	—	—	67½ 60 65	3 0 0	0 15 0—Aug. 1864
256	West Damsel (copper), Gwennap	38 10 0	—		51 0 0	1 10 0—July, 1864
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	215	207½ 212½	413 0 0	4 0 0—Aug. 1864
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	97½	90 92½	601 10 0	1 10 0—Aug. 1864
1000	Wheal Basset and Grylls (tin)	7 0 0	—		3 0 0	0 10 0—Oct. 1863
512	Wheal Jane (silver-lead), Kea	3 10 0	—		15 0 0	0 10 0—Aug. 1864
4295	Wheal Kitty (tin), St. Agnes	5 4 6	4¾		1 18 6	0 5 0—Aug. 1864
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	2 0 6	—		10 2 6	0 7 6—July, 1864
1024	Wh. Mary Ann (id.), Menheniot [S.E.]	8 0 0	—	14½ 15½	58[17 6	0 10 0—Sept. 1864
100	Wheal Mary (tin), Lelant	36 2 6	—		288 5 0	4 0 0—Mar. 1864
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—		343 3 0	5 0 0—May, 1864
396	Wheal Seton (tin, copper), Camborne	58 10 0	215	210 215	178 15 0	4 0 0—Aug. 1864
1040	Wh. Trelawny (sil.-id.), Liskeard [S.E.]	5 17 0	20	18½ 19¼	50 5 0	0 12 6—Aug. 1864
2044	Wheal Tremayne (tin), Gwinear	6 11 3	—		6 1 3	0 5 0—Nov. 1863
7000	Wicklow (copper) [L.], Wicklow	2 10 0	14½	14½	14 11 0	0 6 0—April, 1864

[* Dividends paid every two months. † Dividends paid every three months.]

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

240	Boscean (tin), St. Just	20 10 0	—		36 10 0	1 0 0—Mar. 1862
3000	Chiverton (lead), Perranzabuloe [S.E.]	6 0 0	7¾	7 7¼	—	—
256	Condurrow (cop., tin), Camborne	76 10 0	90	60 70	85 0 0	2 0 0—June, 1857
2450	Cook's Kitchen (copper), Illogan	17 15 9	—	14 16	1 7 0	0 7 0—May, 1862
1024	Copper Hill (copper), Redruth	12 0 0	—		2 7 6	— —Sept. 1862
1055	Craddock Moor (copper), St. Cleer	8 0 0	—		7 12 0	0 4 0—July, 1862
4076	Devon and Cornwall (cop.), Tavistock	6 6 3	—		0 10 0	0 2 6—Feb. 1859
3000	Dyfngwm (lead), Wales	12 6 6	—		0 17 6	0 2 6—Jan. 1863
940	Fowey Consols (copper), Tywardreath	4 0 0	—		41 9 3	0 2 6—June, 1860
6000	Great South Tolgus, Redruth	0 14 6	2¼	2⅜ 2⅝	7 18 6	0 5 0—Dec. 1861
10240	Gunnis Lake (Clitters' Adit)	0 2 0	—		0 3 0	0 1 6—Mar. 1862
160	Levant (copper, tin), St. Just	2 10 0	—		1091 0 0	5 0 0—May, 1860
640	Mount Pleasant (lead), Mold	4 0 0	—		18 18 1	0 7 6—Aug. 1862
5000	Orsedd (lead), Flintshire	0 0 8	—		0 10 4	0 0 8—Mar. 1862
5000	South Exmouth (lead), Devon	1 14 0	—		0 5 0	0 5 0—Dec. 1862
280	Spearne Moor (tin, copper), St. Just	32 17 9	—		9 15 0	1 0 0—June, 1862
572	Trelyon Consols (tin), St. Ives	14 0 0	—		7 0 0	0 10 0—Sept. 1860
1000	Trumpet Consols (tin), near Helston	11 10 0	—		11 0 0	2 0 0—Mar. 1862
12000	Twelve Apostles Amal. (id.), Wrexham	1 0 0	—		—	— —
1024	Wendron Consols (tin), Wendron	19 13 10	—		8 15 0	1 0 0—Jan. 1861
60	West Burton Gill (lead), Yorkshire	50 0 0	—		14 10 0	3 0 0—June, 1861
1024	West Caradon (cop.), Liskeard [S.E.]	7 0 0	11	10 11	101 1 3	0 10 0—Oct. 1862
1024	Wheal Friendship (copper), Devon	20 0 0	—		295 10 0	5 0 0—Feb. 1861
1024	Wheal Grylls (tin), Perranuthnoe	3 14 0	—	9 10	6 2 0	1 0 0—Sept. 1863
896	Wheal Margaret (tin), Uny Lelant	10 17 6	—	8 8½	76 5 0	1 0 0—May, 1863
6400	West Fowey Consols (tin and copper)	7 10 0	—		0 19 0	0 3 0—May, 1862

FOREIGN DIVIDEND MINES.

20000	Australian (cop.), S. Australia [S.E.]	7 7 6	—		0 1 0	0 1 0—Dec. 1863
2464	Burra Burra (cop.), South Australia	5 0 0	—	70	315 0 0	5 0 0—Mar. 1864
6000	Central American (silver) [L.]	5 0 0	—		4 6 8	0 14 10—Dec. 1863
15000	Cape Copper Mining [L. £10] [S.E.]	7 0 0	11	10 11	0 10 0	0 10 0—July, 1864
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	31		100 0 0	8 0—July, 1864
100000	Don Pedro No. Del Rey [L. £1] [S.E.]	0 10 0	⅝	⅜ ⅛	0 0 9	0 0 9—Dec. 1863
70000	English and Australian [S.E.]	5 0 0	—		1 12 0	0 2 0—Aug. 1864
18000	East Indian Coal, Calcutta [L.]	10 0 0	—		7½ per cent.	— Yearly.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	4	3¼ 3¾	0 11 4	0 3 0—Feb. 1864
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	23		21 10 0	1 0 0—June, 1864
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	1⅛		0 12 0	0 1 0—June, 1864
18000	Linares (id.), Pozo Ancho, Spain [S.E.]	3 0 0	6¼	5 6	10 1 2	0 5 0—Aug. 1864
10000	Lusitanian (of Portugal) [S.E.]	2 0 0	—		1 1 0	0 2 0—July, 1864
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	8		1 7 3	0 7 3—Jan. 1864
97500	Port Phillip (gold), Clunes [S.E.]	1 0 0	1⅛		0 12 6	0 1 0—July, 1864
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	37	36 37	63 15 0	2 10 0—June, 1864
43174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0	5½	5¼ 5¾	2 14 0	0 5 0—May, 1864
10000	Vancouver (coal) [L. £10]	5 0 0	—		0 10 0	0 5 0—May, 1864
25000	Victoria (London) Mining Co. [L.]	1 0 0	—		0 1 9	0 1 9—Aug. 1864
20000	West Canada Mining Company [L.]	1 0 0	—		0 12 0	0 5 0—June, 1864
45000	Yudanamutana (cop.), S. A. [L.] [S.E.]	3 0 0	2⅜	2⅛ 2⅜	0 5 0	0 5 0—Aug. 1863

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0	—		4 5 0	0 15 0—Nov. 1853
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	—		6 18 0	0 10 0—Nov. 1862
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	4 10 0	—		15 per cent.	—May, 1859
103815	Mariquita and New Granada [S.E.]	1 0 0	¾	⅛ ⅝	0 9 6	0 1 6—July, 1859

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos (lead), Spain] L. £2]	0 15 0	1⅛	⅝ 1⅛	..July, 1864
100000	Anglo-Brazilian (gold) [L. £1] [S.E.]	0 5 0	⅜	⅛ ⅜	..Dec. 1863
20000	Bearix Tin Streaming Company [L. £1]	0 17 6	—	—	..Oct. 1863
25000	Capula (silver), Mexico [L. £2] [S.E.]	1 0 0	—	—	..Feb. 1864
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—	—	..Jan. 1859
10000	Copiapo Smelting [L.], Chili	10 0 0	—	—	..Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	—	..Fully paid.
50000	East del Rey (gold), Brazil [L. £3] [S.E.]	1 5 0	—	¼ ⅜	..Oct. 1863
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 12 0	—	—	..Dec. 1863
15000	El Chico Mining and Reduction (silver) [L. £5]]	3 0 0	—	—	..Mar. 1864
20000	Elbe Colliery Company, Bohemia [L.]	1 0 0	—	—	..Fully paid.
30000	Ellerslie and Bardowie (copper), Jamaica	0 18 0	—	—	..July, 1859
8000	English and Canadian Mining Company [L.]	5 0 0	—	—	..Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—	—	..Fully paid.
50000	Frontino and Bolivia (gold), New Granada [L. £2]	0 10 0	—	—	..Mar. 1864
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0	—	—	..June, 1862
24000	Hindostan (copper), Bengal [L. £5]	3 0 0	—	—	..Feb. 1863
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—	—	..Fully paid.
10000	Karbitz Colliery Company [L.]	1 0 0	—	—	..Fully paid.
30000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	—	—	..Fully paid.
100000	Montes Aureos (gold), Brazil [L.] [S.E.]	2 0 0	2⅜	2⅛ 2⅜	..Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	—	—	..Nov. 1858
50000	Nova Scotia (land and gold) [L. £2]	1 0 0	—	—	..Nov. 1862
15000	Pachuca Silver Mining Company, Mexico [L. £1]	1 0 0	—	—	..June, 1863
50000	Panulcillo (copper) [L. £4] [S.E.]	1 0 0	1¾	1⅝ 2	..Feb. 1864
6000	Peel River Land and Mineral [Limited]	100 0 0	—	—	..Stock.
23000	Quebrada (copper), Venezuela [L. £10]	4 10 0	—	—	..Jan. 1864
10000	San Roque (lead), Spain	5 0 0	—	—	..Fully paid.
60000	Santa Barbara (gold), Brazil [L. £1]	0 15 0	—	⅛	..Sept. 1864
120000	Scottish Australian Mining Company [L. £1]	0 17 6	—	—	..Feb. 1864
15000	South Europe Mining Company, Spain [L. £5]	3 0 0	—	—	..May, 1860
12000	Teplitz Colliery Co., Bohemia [L. £5]	3 0 0	—	—	..June, 1864
5000	Valgodemard Mining Company [L. £20]	8 0 0	—	—	..June, 1864
50000	Vallanzasca (gold), Italy [L. £1] [S.E.]	0 7 6	—	1⅜ 1½	..Dec. 1863
45000	Victor Emanuel (copper), Italy [L.]	1 0 0	—	—	..Fully paid.
1000	Western Africa Malachite (copper) [L.]	110 0 0	—	—	..Oct. 1862
12000	Wheal Ellen (copper), South Australia [L.]	5 0 0	—	—	..Fully paid.
90000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	—	1	..Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
700	Aberdovey (sil.-lead), Merio	4 0 0	—		..Sept. 1863
1000	Alt-y-Crib (lead) [L. £5]	4 12 6	—		..July, 1864
6000	Bagtor (tin) [L.]	2 0 0	—		..Fully paid.
4000	Bedford Cons. (cop.), Tavistk.	2 9 0	—		..July, 1864
3200	Bedol Aur (lead), Holywell	0 12 0	—		..June, 1864
9000	Berehaven (copper), Ireland	1 0 0	—		
400	Billins [L. £30] [200 £25 pd., 200 £30 pd.]	0 0 0	—		..Oct. 1863
6000	Boscawen (tin), Kenwyn	2 10 0	—		..Feb. 1864
2280	Boscundle (tin, cp.), St. Austell	7 10 0	—		..Sept. 1862
5000	Bottle Hill (tin) Plympton	1 8 6	1s.		..May, 1864
30000	Bromlow (id.), Minsterley, Salop	1 0 0	—		..Fully paid.
200	Brynford Hall (lead), Flint	20 0 0	—		..Aug. 1863
500	Bryn Gwiog (lead), Flint	9 0 0	25	20 25	..June, 1864
1832	Bryntail (lead), Llanidloes	8 7 6	3½	3 3½	..June, 1864
6380	Buller & Basset, (cp.) Redruth	6 11 6	—		..Feb. 1864
12000	Calstock Consols (cop.), Calst.	1 17 6	—		
915	Calvadnack (tin), Wendron	25 3 6	—		..Aug. 1864
1000	Camborne Consols (copper)	18 10 0	—		..Feb. 1864
4600	Camborne Vean & Wh. Francis	9 18 4	—		..June, 1864
75000	Cambrian Consolid. (gd.) [L. £2]	1 0 0	—		..Aug. 1862
8000	Cape Cornwall (cop.), [L. £2 10s.]	1 0 0	—		..Aug. 1864
12000	Caradon & Phœnix Cons. [L. £1]	0 10 0	—	14s.	
914	Caradon Cons. (cop.), St. Cleer	28 16 6	—		..June, 1864
6000	Caradon Unit. (cop.), St. Neots	1 0 0	—		..June, 1863
2580	Carmarthen United (lead)	5 0 0	—		..Fully paid.
2000	Carnelloe (tin and cop.), Zennor	1 0 0	—		..Jan. 1864
6000	Carn Camborne (cop.), Cambn.	1 9 0	33s.	33s. 35s.	..July, 1864
3000	Carn Vivian (tin, cop., lead)	2 1 6	—		..Nov. 1861
2048	Carnyorth (tin), St. Just	4 10 0	—		..June, 1864
20000	Caryafort [3200 £2½ pd., 16300 £1 pd.]	—	—		
10000	Castleward, Ireland [L.]	1 0 0	—		..Fully paid.
2500	Cefn Cilcen (id.), Flint [L. £5]	2 3 6	—		..Aug. 1864
800	Cefn Cwm Brwyno (lead)	4 0 0	—		..May, 1864
2000	Central Grylls (tin) [L. £3]	2 10 0	—		..Feb. 1864
2500	Central Minera (lead) [L. £5]	2 12 0	—		..Aug. 1864
6000	Charlotte Untd., Perranuthnoe	4 17 8	—		..Oct. 1863
3000	Chiverton Moor (lead)	3 0 0	—		..Feb. 1864
3000	Chiverton Valley (lead)	3 0 0	2		..Jan. 1864
4000	Ciara Unit., Ponterwyd [L. £3]	2 2 0	—		
1024	Cleer's Hill (tin), St. Stephen's	0 2 0	—		..Aug. 1864
787	Clijah & Wentworth (tin, cp.)	33 0 0	—		..May, 1864
3000	Clowance Wood [L. £5]	1 10 0	—		..Jan. 1864
16000	Cooleirra & Bond [L.], 8500 £1 pd., 10700 12s. pd.	—	—		..Fully paid.
50000	Connorree (cop., sulph.) [L.]	1 0 0	19s 6d.		..Fully paid.
6000	Cornish Clay and Tin [L.]	1 0 0	—		..Aug. 1864
861	Crane (copper), Camborne	24 0 0	13	12½ 12¾	..June, 1864
30000	Crenver and Wh. Abraham [L.]	2 10 0	—		
12000	Crelake (cop.), Tavistock	2 13 0	—		..April, 1864
2000	Crowlwm (lead), Llanidloes	1 11 0	—		..Dec. 1863
6000	Cuddra (cop., tin), St. Austell	4 1 0	—		..Feb. 1864
35000	Dale (lead), North Stafford	1 0 0	—		..May, 1864
1000	Darren (lead) [L.], Cardigan	6 8 0	12	12	..Sept. 1864
2000	Deep Level, Minera (id.) [L. £5]	3 5 0	—		..Feb. 1862
672	Ding Dong (tin), Gulval	44 10 6	—		..Dec. 1863
20000	Dolfrwynog (gold) [L. £1]	0 15 0	—		..June, 1864
1000	Durlo (tin), Lelant	8 2 0	—		..Oct. 1862
1000	Eaglebrook (lead) [L. £20]	17 2 0	—		..April, 1864
1000	East Basset and Grylls (tin)	2 7 6	—		..Aug. 1864
6000	E. Bott'e Hill (tin), Plympton	0 4 6	—		..Aug. 1864
50000	East Cambrian (gold) [L. £1]	0 15 0	—		..Feb. 1864
6000	East Carn Brea (cop.), Redruth	3 15 0	7¾	7¼ 7½	..Feb. 1863
2000	East Chiverton (lead)	2 10 6	—		..Aug. 1864
50000	E. Clogau (gold), Merio. [L. £1]	0 6 0	—		..Mar. 1864
4000	East Devon Gt. Consols (cop.)	1 14 0	—		..May, 1864
2048	E. Falmouth (s.-ld.), Kenwyn	5 0 6	—		..April, 1864
6000	E. Grenville (cop.), Camborne	2 7 0	7⅜	7⅜ 7¾	..Aug. 1864
6000	E. Gt. Work (tin), Breage [L. £5]	2 10 0	—		..May, 1864
4000	E. Gunnis Lake & S. Bedf. (cop.)	7 15 6	⅜	⅜ ⅛	..June, 1864
6145	East Jane (sil.-ld.), Cardinham	2 7 0	—		..Mar. 1864
6000	East Laxey (lead) [L. £3]	2 0 0	—		..July, 1864
1024	E. Margaret (tin), Uny Lelant	20 5 0	—		..Aug. 1864
8000	E. Polberro (tin) [L. £1] [4000 £1 pd. 4000 2s. 6d. pd.]				..Nov. 1863
3986	E. Providence (tin), Uny Lel.	4 4 8	—		..Dec. 1863
5000	E. Rosewarne (cp., tin), Gwin.	2 15 0	3⅜	3⅛ 3⅜	..Sept. 1862
5610	East Seton (cop.), Camborne	0 10 0	—		..Dec. 1863
256	East Tolgus (copper), Redruth	88 0 0	—		..June, 1864
1024	E. Treskerby (cop.), Redruth	10 1 0	6	5 6	..Aug. 1864
1190	E. Wheal Agar (cop.), St. Cleer	11 17 0	—		..Sept. 1863
1300	E. Wheal Ellen (cop.) St. Agnes	0 7 6	—		..April, 1864
2000	E. Wh. Fortune (tin) Sithney	1 0 0	—		..April, 1863
2048	East Wheal Grylls (tin, cop.)	2 2 6	—		..July, 1864
6000	East Wheal Metal (tin and cop.)	—	—		
4000	E. Wh. Russell, Tavis. [S.E.]	9 0 6	4⅞	4½ 4¾	..June, 1864
6000	East Wheal Vor (tin and cop.)	5 0 0	—		
2000	Erwfelin (lead), [L. £3]	1 0 0	—		
6144	Esther Und. (tin), Cardingham	0 3 10	—		..Sept. 1864
6000	Fortescue Cons. (sil.), Endellion	0 12 6	—		
6000	Furze Hill Wood Cons., Buckl.	1 5 6	—		..April, 1864
1026	Garden (tin), Morvah	4 17 9	—		..May, 1863
4096	Garlidna Untd. (tin), Wendron	4 1 6	—		..Mar. 1864
1000	Garreg (lead), Flint	5 14 6	—		..Dec. 1863
4000	Gawton (copper), Tavistock	2 9 6	—		..June, 1864
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	4¼		
30000	Glasgow Caradon Con. (cp.) [L.]	1 0 0	—		..Fully paid.
32	Godolphin (cop., tin), Wrexham	4 0 0	—		..Aug. 1864
5700	Gogi an (silver-lead)	12 10 0	—		..April, 1864
2000	Golch Hill (lead), Flintshire	1 0 0	—		
6144	Gonamena (copper), St. Cleer	4 7 0	—		..Mar. 1864
2000	Goonzion (copper), St. Neot	1 12 6	—		..Aug. 1864
486	Gramb. & St. Aub. (cp.) [S.E.]	63 0 0	5	8 10	..Sept. 1864
5000	Great Brigan (cop.), Redruth	6 11 6	—		..Sept. 1864
4096	Great Caradon (cop.), St. Ive	2 12 0	—		..June, 1864
10000	Great Devor and Bedford [L.]	1 15 0	—		..Mar. 1864
3000	Gt. East Lovell (tin), Helston	1 0 0	—		
5000	Great North Downs (copper)	4 0 0	5		..Sept. 1864
6000	Gt. Retallack (sil.-ld., blende)	2 6 6	—		..April, 1864
6000	Great S. Chiverton (sil.-lead)	0 10 0	3½	3 3¼	..April, 1864
52000	Great Tregune Consols (cop.)	0 5 0	—		
3000	Great West Chiverton (lead)	1 0 0	—		..June, 1864
3730	Great Wheal Baddern (tin)	6 16 0	—		..May, 1863
10000	Gt. Wh. Metal, Breage [L. £2]	1 0 0	—		
2500	Grit and Slapeley (lead), [L.]	10 0 0	—		..July, 1864
2048	Grylls Consols (tin)	1 5 0	—		
4000	Grylls Wheal Florence (tin)	—	—		
6000	Gt. Wh. Busy (cop., tin), Ken.	13 14 6	2¼	2 2¼	..April, 1863
3072	Gt. Wh. Grylls (tin, copper)	1 0 0	—		..No call.
4910	Gurlyn (cop., tin), St. Erth	2 14 11	—		..July, 1864
6068	Gwydyr Park Con., Llanrwst	1 7 3	—		..Feb. 1864
6000	Halienbeagle (copper)	1 0 0	3¾	3⅛ 3¾	..July, 1864
6400	Harwood (id.), Durham [L. £1]	0 6 6	—		..Sept. 1864
5000	Havan (id.)., Cardigan [L. £5]	4 0 0	—		..Feb. 1864
5000	Hazael Grove (sil.-id.) [L. £1]	0 10 0	—		..No call.
7219	Hawkmoor (tin, cop.) Calstock	3 6 0	—		..Feb. 1864
5000	Hendre (lead), Flint [L. £5]	2 0 0	—		..May, 1864
6000	Hingston Down (cop.), [S.E.]	5 10 6	4½	4 4¼	..Dec. 1863
6000	Illogan (tin and copper)	0 12 6	—		..Nov. 1863
5000	Kelly Bray (id.), Callington	5 2 6	¼	10s. 11s.	..June, 1864
6000	Keswick (lead), Portinscale	5 6 6	—		..Mar. 1862
96	Kilmorey (lead)	25 5 0	—		..Feb. 1864
6000	Lady Bertha (cop.) [S.E.]	3 0 6	—		..July, 1864
3000	Lanivet (tin), [L. £2]	1 14 0	—		..Aug. 1864
1019	Leeds & St. Aubyn (tin, cop.)	17 6 6	—		..Feb. 1862
963	Lelant Cons. (tin), Uny Lelant	55 0 0